

**Save
£££ on upgrades**

August 1994 • Issue 103 • £3.60 Overseas £3.85 inc. p. & a

EURO PRESS
PUBLICATIONS

ATARI ST USER

**Paper
versus
pixels**

**Computer art
techniques
for the ST
explained**

**No disk!
Ask your newsagent**



PLUS: Computer porn update, STs in education, Diamond Back 3, Kobold, TrakCom

**540Mb
£599**

**All NEW GASTEINER
Hard Drive for Atari ST,
STFM, STE, MEGA ST,
MEGA STE & the
formidable FALCON
030.**

Award winner for BEST
HARDWARE 1993 – *ST
Review*

The All NEW
GASTEINER Hard Drive
has all the following
features:

- 1, Auto Booting and
Auto Parking
- 2, Front On/Off switch
- 3, Power indicator
(LED) light
- 4, SCSI icon selector
switch
- 5, Sleeve bearing Fan
(17CFM)
- 6, Dual SCSI Port
- 7, Internal 5%
Tolerance P.S.U. (90-
260 VAC)
- 8, Top Quality
Formatting and
Partitioning Software
- 9, New Compact Case
(4.00x4.64x9.00)
(HxWxD)
- 10, 12 Months back to
base guarantee



GASTEINER HARD DRIVES

		TT/FALCON	STE/STFM
GHD	40Mb	P.O.A.	P.O.A.
GHD	120Mb	£229.00	£279.00
GHD	170Mb	£259.00	£299.00
GHD	270Mb	£349.00	£379.00
GHD	340Mb	£399.00	£449.00
GHD	540Mb	£599.00	£649.00
GHD	1080Mb	£899.00	£949.00
GHD	1800Mb	£1299.00	£1349.00

(1) EXPERIENCE

With over 20 man years experience in the Atari Computer market. Servicing many happy customers (over 10,000) we are the foremost manufacturers of Atari Hard Drives.

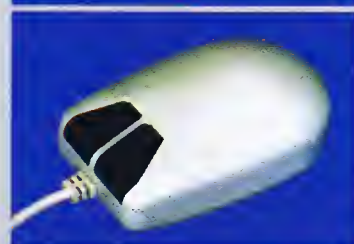
(2) DESIGN

Using the latest C.A.D. Technology we consider Power Supply design, Air Flow characteristics and Drive Specifications, combined with innovative manufacturing processes, ensure that we can produce the most reliable products to the highest standards.

(3) TESTING

Following the initial design process all our products are subjected to an in-depth testing procedure including mechanical and electrical tests while thermal Trials ensure the reliability of any configuration in every possible environment.

NEW



NEW 200 DPI MOUSE. Small and compact for all Atari ST range systems.

£6.99

ALFA DATA SCANNERS



Alfa Scan Plus.....£119.00
Alfa Scan OCR.....£139.00
System requirements 2Mb RAM +
Hard Drive
Mono Scanner for Falcon.....£99.00
Colour Scanner for Falcon.....£399.00

MICE+TRACKBALLS



- Pure Optical Design with High Resolution
 - Light, accurate, easy to use and long life
 - With tough pure optical mouse pad
- Alfa Pen.....£34.95
Alfa Optic.....£29.95



- Two colour illuminating crystal ball (TKB MT AC ONLY).
 - Ergonomic Design for very comfortable operation.
 - Top quality construction with micro switch buttons.
- Standard Trackball.....£29.95
Crystal Trackball.....£34.95

Repair service

New service/centre for most Atari computers. We offer a quotation service of £10 for which we will examine your computer and report back with an exact quotation price for the repair. If the repair is carried out the £10 is then deducted from your bill.

How to order

When ordering by telephone please quote your credit card number followed by the expiry date and also your full name and address. If paying by cheque please make it payable to Gasteiner Technology. In any correspondence please quote a phone number and also a postal code, please allow five working days for cheque clearance.



Delivery charges

Small consumables and software items under the value of £59 please add £3.50 P&P. Other items except lasers, next day courier service £10 per box. Offshore and highlands, please call for a quotation. In addition, we offer the following express services:- Saturday delivery normal rate plus £15 per box, Morning, next day normal rate plus £10 per box. E&OE prices subject to change without prior notice. All trademarks acknowledged.

ATARI COMPUTERS



Atari 1040STE 1Mb.....	P.O.A.
Atari 1040STE 2Mb.....	P.O.A.
Atari 1040STE 4Mb.....	P.O.A.
Atari 1040STE 12Mb.....	P.O.A.
Atari 520STFM 1Mb.....	P.O.A.

FALCON 030 COMPUTERS



Falcon 030 1Mb.....	P.O.A.
Falcon 030 4Mb.....	P.O.A.
Falcon 030 4Mb + 85Mb HD.....	P.O.A.
Falcon 030 14Mb + 85Mb HD.....	P.O.A.
Falcon 030 4Mb + 120Mb HD.....	P.O.A.
Falcon 030 14Mb + 120Mb HD.....	P.O.A.
Falcon 030 4Mb + 210Mb HD.....	P.O.A.
Falcon 030 14Mb + 210Mb HD.....	P.O.A.

FPU for all the above Falcons

— Please call

EMAGIC

...we make computers groove.

Emagic Notator SL.....	£279.00
Emagic Creator.....	£179.00
Emagic Unitor II.....	£230.00
Cubeat.....	£150.00
Cubase Version 3.....	£319.00
Cubase Light.....	£70.00
Notator Alpha.....	£170.00
Cubase Audio.....	P.O.A.
Steinberg Pro 24 III.....	£49.95
Musicom.....	£43.95

FORGET-ME-CLOCK II

CLOCK CARTRIDGE FOR
ST-STE- FALCON

Clock with Thruport.....	P.O.A.
Clock no Thruport.....	£11.95

ATARI MEMORY UPGRADES

INCREASE YOUR MEMORY ST-STF-STFM-MEGA ST + FALCON

Xtra-Ram Board 0Mb.....	£24.95
512K to 1Mb.....	£32.95
2Mb.....	£75.00
4Mb.....	£125.00
8Mb.....	P.O.A.
14Mb Falcon.....	£599.00
4Mb Falcon.....	£149.00
1Mb Falcon.....	£49.00
Virtual Memory.....	£49.00

INCREASE YOUR MEMORY FOR ATARI STE COMPUTERS ONLY

1Mb.....	£4.95
2Mb.....	£50.00
4Mb.....	£100
8Mb.....	P.O.A.

FALCON INTERNAL HARD DRIVE

HIGH QUALITY INTERNAL 2.5" IDE HARD DRIVES FOR THE FALCON, INCLUDING MOUNTING BRACKET AND IDE CABLE

65Mb.....	£139.00
85Mb.....	£149.00
120Mb.....	£199.00
170Mb.....	£239.00
209Mb.....	£299.00
350Mb.....	£349.00
Bracket for Hard Drive.....	£15.00
IDE Cable.....	£15.00

**Falcon Eagle Sonic 32
(32MHz) Accelerator for
Atari Falcon 030£199.00**

FALCON 030 EXTRAS

SCSI II Cables.....	£34.95
ST Monitor Cable.....	£15.00
SVGA Monitor Cable.....	£15.00
Truepaint.....	£33.95
Midi Cable.....	£12.95
Stereo Speakers.....	£29.95
Stereo Headphones.....	£16.95
400DPI Mouse.....	£19.95
Dust Cover.....	£9.95

SCSI BARE HARD DRIVES

40Mb.....	£99.00
85Mb.....	£179.00
127Mb.....	£199.00
170Mb.....	£219.00
240Mb.....	£249.00
540Mb.....	£399.00
1.0 Gig.....	£799.00

SOFTWARE

HI-SOFT PRODUCTS

THE CODERS MULTIPACK (Programming)

Power Basic.....	} £79.95 Normally £124.00
Basic II.....	
Tempus II.....	
Devpac 2.....	

THE HOME OFFICE MULTIPACK (Business Applications)

K-Spread 2.....	} £79.95 Normally £169.00
Harlekin 2.....	
K-Graph 3.....	
Personal Finance Mngr Plus.....	

THE MEDIA MULTIPACK (Video/Music)

Video Master.....	} £129 Normally £229.00
Colour Master.....	
Replay Stereo.....	
Concerto.....	

THE DISK MULTIPACK (Utilities)

Diamond Edge.....	} £99.95 Normally £144.00
Knife ST.....	
Diamond Back 2.....	
Datalite 2.....	

NEW PRODUCTS

Papyrus.....	£127.00
True Image.....	£27.95

WORD PROCESSORS

Word Writer.....	£45.00
1st Word Plus v3.2.....	£39.95

DTP SOFTWARE

Calamus 1.09.....	£95.00
Pagestream v2.2.....	£169.00
Timeworks Publisher.....	£39.95
Calamus SL.....	£199.00
O.C.R. Software.....	£49.95
Touch-up Upgrade.....	£27.95
Easydraw Supercharged.....	£15.00
Cyber Studio.....	£10.00
Cyber Control.....	£5.00
Cyber Paint.....	£5.00
ST-Basic.....	£3.00
Human Design Disk.....	£9.00
Future Design Disk.....	£9.00
Signs + Banners.....	£15.00
Calendar + Stationery.....	£15.00
Art Library.....	£15.00
Easy Tools.....	£10.00
That's Fun Face.....	£10.00
Family Curriculum Software.....	£29.95

BITS AND PIECES

Internal Power Supply for Atari ST, STF, STFM, STE.....	£32.95
Internal Disk Drive.....	£45.00
Keyboard.....	£69.00
STE Motherboard.....	P.O.A.
TOS 2.06 STE.....	P.O.A.
Outer Casing STE, STFM.....	£20.00

ACCESSORIES

Twin Joystick Ext. Cable.....	£3.50
Mono Colour Switchbox.....	£14.95
Multisync Switchbox.....	£29.95
Printer Cable.....	£6.00
Modem Cable.....	£6.00
Null Modem Cable.....	£6.00
Serial Cable.....	£6.00
Philips/Atari Cable.....	£10.00
Scart Cable.....	£10.00
3.5" External Disk Drive.....	£50.00
Blitz Turbo.....	£25.00
Power Cable.....	£6.00
Mouse Mat (picture).....	£5.00
Box 10 Disks.....	£4.00
Dust Covers (all sorts).....	£6.00
DMA Cable.....	£6.00
SCSI Cable.....	£6.00
Centronics to Centronics.....	£10.00
Optical Mouse Mat.....	£10.00
ST-TV Cable.....	£10.00
Printer Switchbox.....	£9.95
Auto Printer Switchbox.....	£14.95
Disk Box (80 capacity).....	£6.95
Disk Box (100 capacity).....	£9.95

AUTOMOUSE- JOYSTICK SWITCH

Allows you to instantly select either your mouse or joystick by a simple click on your mouse. You won't need to fumble around under or behind your computer to swap your mouse and joystick cable ever again, and also it saves you joystick port.

£9.95

BUILD YOUR OWN HARD DRIVE FOR ATARI COMPUTERS

Casing.....	£35.00
45 Watt P.S.U.....	£35.00
SCSI Cable.....	£6.00
DMA Cable.....	£6.00
Power Cable.....	£6.00
SCSI to Centronics Cable.....	£18.00
G.E. Soft Host Adaptor.....	£59.95
SCSI II Cable for Falcon.....	£34.95
Top Link Controller.....	£75.00

MONITORS

Gasteiner GM148 with Sound.....	£129.00
Microvitec 1440 Multisync.....	£389.00
Commodore 1084 SC Colour.....	£199.00
SVGA Mono for Falcon.....	£120.00

Official purchase orders welcome from educational establishments and major corporate. (Strictly 14 days net). Please phone for approval.

All prices include VAT. Prices and specifications subject to change without notice. E&OE.

All goods under £50 please add £3.50 p&p and all goods above £50 please add £10 Courier Service. Next day service please call.

126 Fore Street, Upper Edmonton, London N18 2AX

Major credit cards accepted



Contents



PAPER v PIXELS

Our resident artist explains some of the traditional techniques used to create pictures and asks if they can be applied to computer art

16

• midi and music ♦ utilities ♦ comms ♦ dtp ♦ business ♦ falcon

Aspects of the ST

Midi and music78

Phil Morse shows you how to get high quality samples for your ST without having to spend a fortune

Utilities81

The start of a new regular column in which Günter Minnerup explores utilities and their uses

Communications83

What's hot and what's not in the comms world. Steve Gold reports on the latest developments in the field

DTP85

Andrew Wright puts the finishing touches to his newsletter series

Business87

How to reduce business costs and fend off potential legal problems. Richard Williams explains

Falcon89

Want to speed up your Falcon? Jahn Hetherington shows how Warp speed technology can help



ST ACTION

Great Courts II60

International

Sensible Soccer62

Cadaver64

Leisure Suit Larry 366

Work In Progress:

Stardust67

Leisure Suit Larry 3

Cheat Mode68

Cannon Fodder

Cheat Mode70

**Page
59**

**New releases, news, cheats and
reviews for the dedicated Atari gamer**

**Next
month
on sale
August 8**

specials

26 Hard Drives

A detailed look into the benefits of owning a hard drive and the software needed to get the most out of them



36 Comms for beginners

We explain in non-anorak terms what you need to connect your ST to the mass of data waiting at the end of the phone

40 Porn update

Phil Morse returns to the subject of computer porn to look at how government officials and the law are dealing with it

48 Deutsch developers

We pay a visit to German Atari developers Galactic and discover their "roots" and their views on the Atari market

reviews

21 Imagecopy 3

One of the most popular Atari graphics utilities gains even more features and improvements in its latest incarnation

22 Diamond Back 3

Dispel your fears of catastrophic data loss with HiSoft's vastly improved disk backup package

30 Kobold

Check out a utility which claims to significantly speed up and improve file copying and manipulation on all Ataris

34 TrakCom

The musical talents of Don Maple are revealed with the aid of Compo's latest music software

47 Easy Stitch

Tina Hackett is all thimbles and thumbs as she puts Emerald City's cross stitching software through its paces

52 T'Phone & Voicemail

We take a look at two new products from Compo Germany which look set to replace the answer machine

regulars

7 News

ELSPA Crime Unit's first private prosecution of software pirate, Jaguar sales success and more hot news

10 Euro News

A talking mouse, a plug in ST for PC owners and other interesting developments from across the channel

12 CoverDisk

Video titling software, a boot manager, an addictive two-player game and more utilities await you on this month's disk

39 Write Now

Air your views and comment on all things Atari. Topics this month include CD-ROM and full priced games

44 Public Sector

Three pages of information about the latest releases and developments within the public domain and shareware world

54 Switched On!

This month, we visit George Dixon school and find Atari computers playing a major role in the classroom

72 Subscriptions

Save money and pick a free gift when you take out a 12-issue subscription to your favourite ST magazine

74 Advice Service

Got a problem with your computer? Then this is where you need to turn to with your pleas for help

78 Aspects

Seven pages of information-packed articles on music, comms, business, DTP, utilities, emulation and the Falcon

READER OFFERS

24 Upgrade Service

Fifteen £££-saving ways to improve your ST's memory, power and ease of use

The CoverDisk



Do you want to add a little panache to your home videos? Or maybe create your own computer video? Then check out this month's exclusive demo of Video Supreme, a brilliant video titling utility which lets you add text, graphics and sampled sound effects to your home videos
PLUS:

- **Utopos** - A two-player blast-'em-up featuring split screen display and eight-way scrolling
- **Start-it!!!** - A powerful boot manager utility with a great looking interface
- **Double** - Double the screen height in medium and high res on your STE
- **HP Deskjet drivers** - Three Deskjet printer drivers for Word Writer 2

The DISK starts on page 12

EDITOR John Butters
ART EDITOR Terry Thiele
TECHNICAL EDITOR Darren Evans
PRODUCTION EDITOR David Longworth
STAFF WRITERS Jonathan Maddock, Simon Clery, Adam Phillips, Tina Hackett
EDITORIAL ASSISTANT Lisa Bracewell
AD MANAGERS Emme Barr, Wendy Binnersley, Lucy Oliver
AD PRODUCTION MARKETING MANAGER Sandra Childs
PRODUCTION MANAGER David Wren
CIRCULATION DIRECTOR COMAG (0895) 444055
DISTRIBUTION SUBSCRIPTIONS 051-357 2961

Published by Europress Publications Ltd.
Europa House, Adlington Park,
Macclesfield SK10 4NP
Tel: 0625 878888 (all departments)
Fax: 0625 850652

CHAIRMAN Derek Meakin
MANAGING DIRECTOR Ian Bloomfield

Member of the Audit Bureau of Circulation
Atari ST User is an independent publication and Atari are not responsible for any of the articles in this issue or for any of the opinions expressed.

© 1994 Europress Publications Ltd.
No material may be reproduced in whole or in part without written permission.
While every care is taken, the publishers cannot be held legally responsible for any errors in articles, listings or advertisements.

EUROPRESS
PUBLICATIONS

Printed and bound by BPC Magazines (Carlisle) Ltd
A member of the British Printing Company Ltd

12 issues subscription rate: £39.95 (UK), £54.95 (EEC), £74.95 (World)
Ongoing quarterly direct debit: £8.49 (UK only)

System Solutions

The DeskTopper

NEW. A solid metal case to replace the plastic top of ST(FM/e) and Falcon computers. Only **£69.95**
FreeKeys - separates the keyboard from the computer **£39.95**
DeskTopper & FreeKeys £99.95
Please phone for more information.

CD-Rom Systems

Falcon System: Sony CD-300 Drive, SCSI II Cable, ExtenDOS **£259.00**
Complete ST(FM/e) System: CD-300 Translator, ExtenDOS **£299.00**
ExtenDOS (CD-Rom Driver) £29.95

CD Rom Disks

Lohrum Vol 1 (PD/Shareware) **£29.95**
" Vol 2 (PD/Shareware) **£29.95**
Gemini (Atari PD/Shareware) **£24.95**
Clip Master Pro (Clip-Art) **£34.95**
Midi files and .Mods (Music) **£TBA**

Falcon Add-ons

Falcon Wing 0Mb **£49.95**
Falcon Wing 4Mb **£179.00**
Falcon Wing 14Mb **£ Call**
BlowUP 030 - Software **£15.00**
BlowUP 030 - Hard 1 **£49.95**
BlowUP 030 - Hard 2 **£69.95**
14" Monitors **from £99.95**
NEW 15" & 17" IDEK Monitors £ Call
Clarity 16 **£99.95**
Cubase Audio (New V1.10) **In Stock**
FDI - Falcon Digital Interface **In Stock**
FA-8 Falcon Analog In & Out **In Stock**

Communications

Comms Software
CoNect v2.4x **£29.95**
Includes printed manual and registration

Fax Software (requires Fax Modem)
Straight Fax v2.10 **£79.95**
Straight Fax upgrade to v2.1 **£26.00**

NEW - Exchangeable SyQuest Drives
105Mb, 14.5ms Drive, inc. cart **£399.00**
105Mb Cartridge **£59.95**
270Mb Drive: Available soon **£ T8A**

Specials

The Jaguar & Games are now in Stock
T28 Mhz Accelerator **£189.95**
1.44Mb Floppy Drive Kit **£79.95**
The Translator **£69.95**
HD-Driver Software **£19.95**
ICD Link II **£89.95**
ICD Pro Utils **£39.95**
ST(fm/e) Tower **£189.95**
Falcon Tower Kit **£159.95**
Falcon 030, 32Mhz, 4Mb, 60Mb Hdd, M/Tos, S-Gdos, Works **£795.00**
As above, 120Mb Hdd **£895.00**

To order and for further information telephone or write to:

Mail Order Telephone
0753-832212

System Solutions
Windsor Business Centre,
Vansittart Road, Windsor, SL4 1SE
Fax: 0753-830344

or come to our London Showroom at:

The Desktop Centre
17-19 Blackwater Street,
London, SE22 8RS

Tel: 081-693 3355 Fax: 081-693 6936

All prices include VAT
For small items under £50 please add £3.50 P&P
Large items over £50 add £10 courier charge

Monochrome Monitors

The award winning SM14 is a perfect replacement for the Atari SM124/5 monochrome monitors: it exceeds Atari's original specifications. The 14" high resolution, paperwhite FST (Flatter, Squarer Tube), gives a perfectly centred, crisp, sharp image without blurring at the edges.

The SM14 comes without, and the SM14s with, a speaker. The SM14f is for the Falcon. A Tilt and Swivel stand comes as standard.

The special version for STfm/Mega ST installed with Overscan, the screen enhancer, gives a 40% bigger display.

All monitors come as a plug-in-and-go unit, complete with Atari plug, and no adaptors are necessary.

"Essential Buy, 90%"

ST Review, May 93

SM14/f	without audio	£129.95
SM14s	with audio	£149.95
OverScan ST		£39.95

MiniS - Hard Drive System

The MiniS Hard Drive System comes with drive capacities ranging from 40Mb up to 1800Mb. This full SCSI system is hardware compatible with all Atari computers, Amiga, Mac, PC etc. They are unrivalled in size, noise, speed, and style and come with a thru port for expansion.

It is the only Hard drive awarded an Essential Buy of 92% - Atari ST Review Christmas '93, and a Gold Award of 93% - ST Format Feb. '94

★ Quiet fan ★ Internal Power Supply 100-240v
★ 2 Year Warranty ★ Small (2.5x6x8.5in) (WxHxD)
★ Dual SCSI port ★ Device Number Switch ★
★ Now with HD-DRIVER FREE

	TT/Falcon	ST(FM/e)
40Mb	£199	£199
127Mb	£229	£269
170Mb	£259	£299
270Mb	£339	£379
340Mb	£399	£449
540Mb	£599	£639
1.0Gb AV 10ms	£899	£939
1.7Gb AV 10ms	£1199	£1239

Please add £20 to ST(FM/e) if the ICD Link II is required.
Heavy Duty professional cases with 60W Power Supply, add £50.
All Prices include VAT

Falcon 030 Systems - 32Mhz

The Falcon is fast becoming the preferred choice for 8 track digital recording, with powerful programs such as Cubase Audio using it to its full potential. The DSP chip opens up a whole new world of Sound and Graphics. System Solutions now supply 32Mhz Falcon 030 computers from stock.

PowerUp2 is a brand new 32Mhz accelerator for the Falcon, available now. PowerUp2 doubles the CPU

clock speed and does not take up the internal expansion slot.

We supply systems for Music, Desk Top Publishing, Image Manipulation, Animation, Desk Top Video, fax & modem use etc. Please phone for your personal quotation of a tailor-made Falcon 030 System.

PowerUp2 kit	£59.95
PowerUp2 fitted	£99.95
Falcon 030, 4Mb Memory	£599.00
with PowerUp2 fitted	£659.00

Magic - Multitasking Operating System

"It's like running an accelerator and getting the multitasking thrown in for free." ST USER, Feb. 1994

Magic is a full TOS replacement, a very fast disk filing system; has accelerated serial, midi and printing routines, and is, of course, a true pre-emptive multitasking system.

Magic Desk, a replacement Desktop and a powerful command shell have been included. Magic runs on all ST, Mega and TT computers with 512Kb, but 2Mb is recommended for a

useful working system. The Falcon version is expected later this year.

"If you want a multi-tasking system that works simply and reliably, then Magic is for you." ST Review, June 1994.

Magic (Intro price)	£69.95	£59.95
Magic and NVDI	£199.90	£89.95
Magic and Kobold	£129.90	£99.95

NB: Excellent with Calamus SL. Compatible with Notator Logic, but not with Notator SL and not yet compatible with Cubase.

NVDI

NVDI replaces the Atari display routines. Screen updates with NVDI are 3-10 times faster. Works with all TOS versions on all Atari ST, MegaST, TT and Falcon 030 computers.

Cubase and Notator compatible. 'Compatibility is remarkable and we have yet to find a program that is not compatible with NVDI'.

ST Review Issue 16, August 1993.

NVDI version 2.5	£49.95
NVDI & Kobold	£89.95

Kobold

Kobold is a high speed file manager. Its unique handling of the Atari file system gives unrivalled speed when copying, moving and deleting files. Copies 1000 files, (10Mb) in 45sec, (GEMDOS 5:35min) Use Kobold for Backups, Formatting Floppies, Move/Copying, Updates, Timed Jobs, etc.. It also includes a script learn function to automate repetitive functions.

Can be run as an .ACC or .PRG
Kobold 2.5 (Intro Price) **£59.95** **£49.95**

Repairs and Upgrades

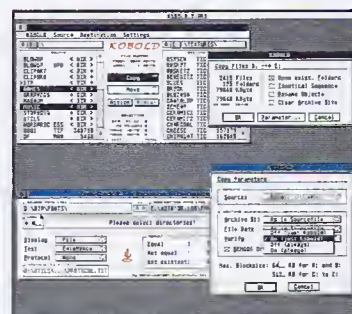
All repairs are carried out by qualified personnel. If you would like a quote, please ask for an estimate. Need it back in a hurry? Then ask for our professional next-day service. Call us to discuss your upgrade requirements. We fit all quality upgrade products available. We can collect and deliver by courier.

Atari Workshop is
the only UK company
with TWO full-time
Atari Service centres.

Windsor Service Centre:
off Duke Street, Windsor, SL4 1SE.

Tel: 0753-818816

London Service Centre:
17-19 Blackwater Street, East Dulwich,
SE22 8RS. Tel: 081-693 1919



Call the professionals
now for your personal
quote.

ATARI
WORKSHOP

Jaguar is a sell out

The first shipments of Jaguar consoles have sold out in most places and have been met with a chorus of approval from independent retailers across the country, according to Atari. The indies who have managed to stock the 64-bit console have all given it full marks for sales potential.

"I have sold more Jaguars in three days than any other format in the rest of 1994 put together," said Steve Palmer from Computer Run in Abingdon. "Atari is an unusual saviour, but they have produced a product that the consumer wants, at a price he is prepared to pay and our industry badly needs that."

At SDL, the distributors of the machine, group marketing controller John Arundel said: "We cannot wait to get our hands on more Jaguars. Response to our first batch has been overwhelming and it looks like Atari's Jaguar will be a roaring success!"

While Atari claim that around 70,000 units have been sold in the States, the Jaguar's fate in Britain is still a subject of much debate due mainly to the lack of substantial stock.

by Adam Phillips



Darryl Still: "Jaguar is an opportunity nobody should miss."

DEXtrous Desktop for Falcon

Released in August, the DEXtrous Cyber-Iconic File Manager is a multitasking operating system for the Falcon. Soon to join the competitive ranks of Geneva, Neodesk and Magix, the package will feature its own custom operating system called PACE.

Features include a drag and drop, advanced VDI/window system that allows DEXtrous to be called up from within any program. One of the product's innovative facilities is the cyberspace browser – the user will be able to view a large recursive cyberspace, where files are visualised "inside" directories. It is claimed the user will, quite literally, "move" into directories and look round.

Also included is an Iconic Organiser which can organise files into "logical" directories similar to the Program Groups found in the Windows Program Manager. It is also possible to generate icons from any graphics file to produce thumbnails.

For aesthetic enthusiasts, DEXtrous has a configurable desktop that can be adjusted and tailored to individual tastes.

Expected price for the package at the time of going to press is £39.95 and it will be available from Black Scorpion Software (021-414 1630).

DEXtrous Desktop: offers a custom operating system and multitasking for the Falcon



Private prosecution for piracy

The Crime Unit recently created by ELSPA to combat software theft, has had its first success with a private prosecution brought against pirateer, Philip Richards. A private investigator working for the association discovered that Richards was illegally copying and selling games software.

The prosecution was brought following a visit by the investigator to Richard's home in December 1993. There, Philip copied and sold the ELSPA man four programs for the Amiga 1200. Police later raided the house and seized both computer equipment and over 2,000 computer disks.

The magistrates at Kettering Magistrates Court in Northumberland found Richards guilty of breaching section 107 of the Copyright, Designs and Patent Act 1988. He was fined £75 for each of the four copied programs he attempted to sell, and was charged £250 costs.

Also successful were three raids carried out netting pirated CD software worth £10 million.

John Loader, chief investigator for the Crime Unit, said: "We warned that new low cost CD-R copying equipment could potentially lead to huge losses for UK software producers and could lead to the distribution of high quality pornographic material on CD. The retrieval of £10m worth of software on just 500 CDs perfectly illustrates the enormous threat posed to the commercial software industry..."

Members of the public with information on illegal software should contact ELSPA on 0386 833810. All calls will be treated in confidence.



John Loader: "Yet again, in one of these raids we have referred material to police anti-pornography departments."

News briefs

Paperback help

Owners of Complete Works and Fine Words experiencing difficulties with some of the features available can seek solace with Kuma Books' latest paperback release.

Costing £16.95, Complete Works and Fine Words Explained looks at the programs as complete packages, and explains all the facilities in easy to understand English without the need for computer jargon.

Kuma Books can be reached on 0734 844335.

★ ★ ★

Jaguar secrets

Atari are keeping their usual tight lips sealed on news of the latest developments for the Jaguar. Darryl Still, marketing manager of Atari UK, has promised dramatic revelations at the Chicago CES show in June.

Atari ST User will report on these as soon as the information is made available.

★ ★ ★

Lynx game bundle

The price of the Atari Lynx has been cut to £49.99 and will come with one free title. The game has yet to be specified by Atari.

★ ★ ★

Techy education

The European Technology in Learning Show is appearing for the first time at the NEC and is targeted at both business and educational sectors.

Running from the 16-18th November, the exhibition will cover a variety of subjects from the information superhighway to virtual reality classrooms.

For further details, call Julie Smith on 0254 676025.

★ ★ ★

Make a date

The next issue of Atari ST User is available from all good newsagents on July 11th

Diary Dates

September 20-25, 1994
Live '94

Venue: Earls Court
Organiser: News International
(071-782 6893)

Players in the electronic entertainment industry have pledged their support for this large consumer electronics show.

October 6-9, 1994

BBC Big Bash
Venue: NEC, Birmingham

Organiser: Haymarket Exhibitions
The Future World area of this big show will contain the latest computer games and virtual reality.

Success for SyQuest

SyQuest Technology, suppliers of removable Winchester disk cartridges and associated drives, have settled their litigations with Iomega Corporation and Nomai S.A.

Under a definitive settlement agreement, SyQuest will receive royalty payments from the two companies in exchange for a licence of certain intellectual property rights relating to SyQuest 44Mb and 88 Mb 5.25" cartridges.

Also according to SyQuest, hardware produced by Iomega and Nomai is being passed off by certain resellers as genuine SyQuest cartridges. In some cases, Iomega and Nomai resellers have advertised what appear to be genuine SyQuest cartridges, sometimes with their logo or pictures of SyQuest cartridge packing. However, when customers examine the cartridges sold, they turn out to be Iomega and Nomai cartridges instead.

To assist customers who have experienced damage to their SyQuest SQ555 and SQ5110 drives caused by the Iomega or Nomai cartridges, the company will honour its warranties on the drives if Iomega and Nomai pay for the cost of the repairs.

As a final sting in the tail, SyQuest will also sell its drives and cartridges to the two companies, who will be able, in turn, to offer dissatisfied customers genuine SyQuest products as replacements.

"We're pleased to settle these litigations on such a favourable basis," said David Everett, SyQuest's executive vice president of sales and marketing. "Iomega and Nomai have clearly recognised the superiority of SyQuest's Winchester technology."

"Our consistent legal position has been that manufacture and sale of cartridges by Iomega and Nomai illegally infringed SyQuest's intellectual property rights. Our position has now been vindicated".



SyQuest: Litigation finally resolved

Compuserve services and membership grows

According to details released by the American-based online service, Compuserve, membership in Britain is growing at a rate of more than 1,000 per week and is currently in excess of 48,000.

"More and more people are finding out what we early online members know - online services are key resources," said Cheryl Currid, who monitors the online services market for Currid & Company. "It doesn't surprise me to see the masses discover the benefits of online services. I just wonder why it took them so long."

After the announcement of further services specifically aimed at the UK market, the PA News wire is now available to the user providing up-to-the-minute news in several categories including general, financial, sports, parliamentary, law and royal reports.

At election time PA Online will include a special category for results of local and national contests.

Clive Marshall, Sales Director of PA News said: "Every national newspaper and broadcaster uses the PA service of news and sports information. Now Compuserve users can access that service directly and read stories that broke just a few seconds ago..."

The global network has also introduced the Video Game Publishers Forum and Video Games Forum. Through these new services, Compuserve members can see previews of new games for the Atari Jaguar, talk strategy and receive hints, tips and shortcuts on their favourite titles.

The Video Games Publishers Forum allows you to interact with publishers such as Accolade, Spectrum Holobyte, Konami and

Data East. Customer support representatives and game designers will be on line to provide news, product announcements, game codes, screen samples, sound files and more.

The Video Games Forum is an online special interest group of players using the Jaguar as well as other consoles. Here the gamers can discuss the merits of various hardware and exchange reviews, commentary and playing tips with their fellow enthusiasts.

"There's a lot of excitement in the gaming world about inter-console connectivity," said Compuserve Product Marketing Associate Jim Pascua. "By participating in our forums, players can get the latest news on this and other subjects, as well as make the most of the gaming technology they already have."

For further details, call Compuserve on 0800 289378.

Mouse mat novelties

Mat is the name of The Data Business' new range of novelty mouse mats. They are releasing 12 for the discerning buyer that depict "a cute pig, a lovely frog, a trompe-l'oeil split coffee cup and a sweet little owl" among others.

They also have "his" and "hers" mouse mats, to avoid being labelled sexist, one called "Chesterfield" showing a male torso and the other "Boobs".

Each costs £6.99 and is available from The Data Business on 0865 842224.

Ladbroke Computing



**33 Ormskirk Rd,
Preston, Lancs,
PR1 2QP**

Ladbroke Computing International are one of the longest established home computer dealers in the U.K. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch to ensure that goods arrive in working order, offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup.

All prices are correct at copy date 13/6/94 (while stocks last), and are subject to change without prior notice. All prices include VAT but exclude delivery.

How to Pay

You can order by mail Cheques/Postal Orders made payable to Ladbroke Computing. Or give your credit card details over the phone.

Delivery

Postal delivery is available on small items under £40 (Normally £3, phone for details). Add £7 for courier delivery. Next working day delivery on mainland UK subject to stock (£20 for Saturday delivery).

Open Mon-Sat 9.30am to 5.00pm.

Ladbroke Computing Ltd trading as
Ladbroke Computing International.

Fax: (0772) 561071

Tel: 9.00am-5.30pm (5 Lines)

(0772) 203166



Star SJ144 £369.99
The Star SJ144 is a Colour/Mono thermal wax transfer printer which gives glossy colour output on normal paper.

- 360 dpi resolution
- Emulates Epson LQ 860, IBM Printer & NEC graphics

Star

Star LC100 Colour £119.99
Star LC24/30 Colour £209.99
Starjet SJ48 Bubblejet £210
SJ48 Ink Cartridge £19

Citizen

Citizen ABC 24pin Colour £179.99
Citizen Swift 240 Colour £260

Hewlett Packard

HP Deskjet 310 £239
HP Deskjet 520 £279.99
HP Deskjet portable £199
HP Deskjet 550 Colour £429.99
Hp DJ500 Colour ink cart £26

Lasers

Ricoh LP1200 £599
Panasonic KX-P4400 Laser £499.99
Seikosha OP104 £479.99
New Star Laser (phone for details) £459.99

Add £3 for cable. Add £7 for delivery

Data Pulse Plus

- * Very quiet, no fan necessary
- * Dual SCSI port
- * Internal Power Supply
- * Device Number Selector
- * 2Mb PD software free
- * Free HD Turbo II

The Data Pulse Plus range of drives features a full metal case with integral PSU ideal as a monitor stand.

All Data Pulse Plus Drives now come configured with industry standard 50 way SCSI Centronics sockets which allows connection of the ICD LINK (no clock) for use on the ST or a SCSI II cable for use on the Falcon etc.

To ensure the highest possible

reliability, the drives are tested at every stage of assembly by skilled technicians.

All drives are ready to 'Plug in and Go' when you receive them. When you first boot up your hard drive you will find a wealth of Public Domain Utilities which have been selected by our support staff.

All Data Pulse Plus Drives include 12 months warranty and free phone advice and support by genuine Data Pulse Plus users.

The low power consumption of these Autoparking Autobooting mechanisms means that they can operate well within their safe operational temperature ranges without the need for fan cooling. This coupled with the design of the case results in probably the quietest Hard Drive range available for the ST.

Re-Writeable Optical drives offer staggering density with hard drive speed. Each 3.5" optical disk stores

"Data Pulse is astonishingly fast" - Andrew Wright, ST User

128Mb with access time of 30ms and a data transfer rate of 600K per second.

Data Pulse +170Mb	£260
D/P +230Mb R/W Optical	£890
CD ROM Drive	£180

Phone for further details on CD ROM

Please note all prices quoted are for main drive unit only. Add ICD LINK for use with ST or SCSI cable for use with FALCON

ICD LINK 2	£89.99
SCSI Cable (Falcon)	£29.99
230Mb Optical disk	£39.99
ICD PRO Utilities	£39.99

Monitors/TV's

Dataview Mono ST £109.99

*Quality Mono monitor with Sound * Limited Offer*

The Dataview Monochrome monitor comes complete with our custom designed adaptor. The adaptor incorporates a small beeper and also a 2.5mm output for better sound reproduction. The monitor/adaptor combination is fully compatible with all ST high resolution programmes and includes a tilt/swivel stand.

Screen Beat Speakers £12.99

Multisync Monitor

Microvitec 1438 £289.99

ST Switch Box £19.99

Falcon VGA adaptor £9.99

The Microvitec 1438 is a multisync monitor compatible with both the Atari ST and the Falcon. Utilising the ST switch box it is possible to display all three ST resolutions on the same monitor. Also compatible with screen blaster for the FALCON.

Dataview .31 SVGA Power Management £199.99

This high quality SVGA monitor has power management features. Includes Falcon adaptor.

Dataview .28 SVGA £239.99

This high quality SVGA colour monitor comes complete with Falcon adaptor. The .28 dot pitch gives the highest quality picture (Falcon will only display 256 colours in high resolutions).

ST-SVGA adaptor £19.99

Falcon-Composite £9.99

Falcon SCart £9.99

Falcon-ST Mon adaptor £9.99

SCART STE cable £9.99

SCART STFM cable £9.99

Scart TV

(Requires SCART Lead)

Philips 15PT161A/05 TV £209.99

15" FST SCART input TV with Fastext, On screen menus, 60 channels, remote control, CVBS input, headphone socket. While stocks last.

Modems

2400 Baud Voyager £69.99

2400 baud pocket modem, MNP 2-4 error correction, MNP5 data compression

14400 Baud Pegasus £159.99

Fax Modem

14400 Baud Modem, Auto Dial, Auto answer, Lifetime limited warranty, MNP 2-4 error correction, MNP 5 data compression, S/R Class 1 & Class 2 commands, Group 3 S/R fax modem (compatible with Straight FAX™)

"With reduced call rates there's never been a better time to invest in Communications"

Falcon 030

• 16MHz 32 bit 68030 Central Processor, 16MHz Blitter, 32MHz

56001 Digital Signal Processor

• 1.44Mb 3.5" Floppy, up to 14Mb

RAM. Displays 65536 colours from

262144 palette at 768 x 480

resolution

• 8 Channel 16 bit, high quality. Stereo

sound sampling

FALCON 1Mb RAM No HD £499

FALCON 4Mb No HD £699

FALCON 4Mb 64Mb HD £799

FALCON 4Mb 127Mb HD £899

FALCON 4Mb 209Mb HD £999

Legend Trakball

Ergonomically designed Trak Ball. 320Dpi resolution, 2 microswitched buttons. The Legend Trak Ball is very easy to use. Unlike normal Trak balls the LEGEND is operated with the thumb freeing the fingers to click buttons

ONLY £29.99

3.5" External Drive

Zydec 3.5" External Floppy drive. Includes own external power supply.

£59.99

Eclipse Mouse

High quality 300 dpi mouse with microswitched buttons ST/AM.

£11.99

Marpet Upgrades

Marpet upgrades for the ST are "plug in" and require no soldering. They are compatible with most motherboard layouts and come with full fitting instructions. These boards accept SIMM boards and are upgradeable at a later date. Please check that MMU and Shifter are "socketed" before ordering.

Unpopulated Marpet Board £24.00

See SIMM prices below

Forget Me Clock II £13.99

512K SIMM'S £7.99

2MB SIMM'S £54.99

4MB SIMM'S £109.99

Midistudio Master

240 PPQ Midi Standard file format compatible. 100 tracks. Phrase arrangement. Very easy to use.

£9.99

Atari STE Packs

1040STE Curriculum £199.99

2Mb 1040STE £254.99

4Mb 1040STE £309.99

Atari Jaguar Console

Jaguar with Cybermorph £249.99

Phone for games cartridges

Repair Services

The Only ATARI Authorised Repair Centre in the UK

Our Atari trained technicians can repair ST's at competitive rates. We can arrange for fully insured, courier pickup and return delivery of your machine to ensure its safety. We even have a same day service which will ensure your machine is given priority and subject to fault, completed the same day.

We offer a Quotation service for £15 for which we will examine your machine and report back with an exact price for repair. If you do not wish to go ahead with the repairs then just pay the £15. However if you do go ahead then the charge is included in the minimum charge.

Please note: The minimum charge covers labour, any extra parts are chargeable.

Minimum repair charge £35.25

Same day service £15.00

STFM(E) PSU £34.99

1Mb internal drive £39.99

TOS 2.06 + Switch STFM £65.00

Courier Pickup £11.00

Courier Return £7.00

PC Emulators

- Check configuration before ordering

PC Speed STFM or STE (XT) £49.99

AT Speed STFM (8MHz) £139.99

Euro News

Don Maple does his bit for European union, with a report on the big releases and updates from over there which are going to do rather well over here

We're talking mice

Do you remember that Star Trek movie where the crew return to our century and good old Scotty speaks to a computer? One of our contemporaries then quietly points out that he should use the mouse. "Oh!" says Scotty, picking up the mouse in his hand and saying into it: "Computer!?"

Very funny, but if you have a Falcon you can now actually do that and the computer will know you're talking to it. The magic mouse is called "Hello Mouse" and has been modified to contain a small microphone.

Consequently the mouse has two tails. One is a normal mouse cable, and the other plugs into the Falcon's mic port. But this is more than just a gag.

Hello Mouse comes with an accessory called Tea Time. This is a reminder-type accessory which will talk to you at previously set times.

The messages can be recorded either directly with the mouse or from any other sound source such as CD or cassette. The recorded messages – which are .AVR sound files – can be played back at a specific date and time or repeatedly on a daily



The mouse with two tails – it's no joke

basis. A range of dates can also be set. For example, every Monday between July 1 and August 31 at 8am you can have it play back the message "Wake up, you're on vacation!"

Tea Time together with the hearing mouse sells for DM199 (about £80) and is available from Compo on 0487-35 82.

Ergo!-pro for GFA-Basic

The latest version of this successful GFA-Basic developer environment is out. The program contains a shell, on-line help, program analyser, optimiser and pre-processor. Fully modular and with batch capability the new version costs DM148 (£60).

Also available are GFA-Basic to QuickBasic converter for DM128 (£50), and two sets of useful routines called Tools 1 and 2 priced at DM39 (£15) each. Available from COLUMBUS SOFT, Christof Schardt, Kinzigweg 1, 64297 Darmstadt, Germany.



● ST shareware is very popular in Germany. To make this run even better, Delta Labs Software will from now on act as a clearing house for many programs.

Numerous authors have already entered into an exclusive agreement with Delta to have their software distributed in this way. The series of programs is called "Softline".

Software is delivered with a printed manual and no additional registration is necessary. For more information write to Delta Labs Software, Rembrandstr. 1, 42329 Wuppertal, Germany.

● After a number of smaller successful Atari shows in Germany (proTOS, FEZ-A-BIT) as well as many "Falcon dealer parties", moves are underway to revive the legendary Dusseldorf show.

Nothing has been confirmed but a yet unnamed independent group of organizers are investigating appropriate sites in and around Dusseldorf.

If it ever materializes the show is expected to be held around the September/October timeframe.

ST on a PC

The Janus card mentioned in the ProTOS show report is now shipping. Janus costs DM898 (£360) and a set of 2.06 ROMs needed for it to operate are DM87 (£35).

In addition the card also needs RAM in the guise of 2 SIMMs cards. Janus on a 486 PC will not only run many ST programs but it will do so at up to 25 times faster. For more information write to VHF Computer GmbH, Daimlerstr. 13, 71101 Schoenaich, Germany.

Reading writing

Actually, this month's offering is freeware. OCR, or "optical character recognition", is a program capable of reading written text. Normally the document must first be digitized and this image file is then processed by such a program producing ASCII text.

Currently in version 1.2, the OCR program needs the documents to be saved as IMG files. There are a number of settings that affect the recognition including how accurate the program is.

OCR also maintains a library of fonts which can be loaded and saved at will. For example, a screen grab of a desktop window would be 100 per cent system font. This would produce the directory as an ASCII file.

OCR also excels at slanted and even proportional text. The

accuracy is absolutely amazing – far better than many commercial products – and that's what makes this such a wonderful program.

There is an English language resource file and the program is quite easy to use as all settings are quite self-explanatory. OCR 1.2 can be found on various online services such as OCR12.ZOO or you may try and write to the author.

Since the program is freeware, if you do write you should at the very least include a disk, an SAE and – if you're outside Germany – several International Reply Coupons available at your local PO. The OCR author is at: Alexander Clauss, Stresemannstr. 44, 64297 Darmstadt, Germany.

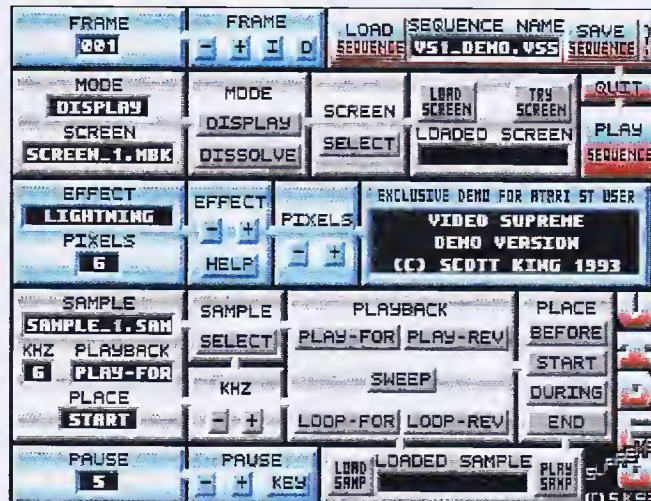




Spruce up your videos with Video Supreme, a great video titling utility. Or you can blow up a friend in Utopos, a two-player arcade game with split-screen display

disk

RECOVER



Everything you need to do in Video Supreme is achieved at the click of a button

Video Supreme

Those of you with a video camera will no doubt have taken video footage of your holidays, parties or weddings. However, once you get back it's usually a case of transferring your video footage from the camera's small video tape to a standard VHS tape.

Using Video Supreme, you can add a more professional touch to your videos by inserting text and graphics sequences as well as digitised sound samples during the transfer.

You don't even need a video camera as you can also use Video Supreme to create your own computer video demos. Simply create your screens using an art package like Degas Elite or Deluxe Paint, create your own sound samples or use pre-recorded ones, and then use Video Supreme to create a film sequence from the images and sounds you have provided. Then, simply run your sequence while recording it to your video recorder.

COMPLETELY USABLE

The Video Supreme CoverDisk demo is completely usable. The only restrictions are that you are limited to ten frames per sequence, the Print Sequence option is disabled, the on-line help function for the effects is not implemented and other ancillary modules and example sequence files are not included.

The complete Video Supreme package allows you to have sequences with up to 200 frames. It also comes as a collection of modules which are accessed from a loader program.

The demo program on the CoverDisk is the editor module, which is the heart of the Video Supreme package, and is where the creative part of producing a sequence is done.

Record text, graphics and even digitised sound sequences to your home videos with this exclusive demo

Other modules in the complete package include the Quick Try Program, which allows you to record sequences to video tape that use sound sample files over 30,000 bytes in size, the Runner Program, which lets you create executable versions of your sequences for distribution or inclusion within other software, the Sequence Preparer, which is a kind of scripting utility and the Screen Compactor utility, which allows you to reduce the size of graphic screens so you can create even longer sequences.

Once you have extracted the Video Supreme archive file, you will find that the Video Supreme executable file (VSI.PRg) is in an AUTO folder. If you have only 512k of memory, do not try running the VSI.PRg file from the desktop as you may experience lack of memory problems. If you have 1Mb or more you should have enough memory to run the file from the desktop. Hard disk users can install Video Supreme to a partition. However, ensure that the Video Supreme files are copied to the root directory and not into a folder.

Included in the Video Supreme demo is an example sequence file called VSI_DEMO. To load this, click on the Load Sequence button at the top right of Video Supreme's interface.

Once loaded, you can run the sequence by clicking on the Play Sequence button. When you press the Play Sequence button you will see a blank screen. Video Supreme is waiting for you to press the space-bar to start. Some

What's on the disk

Program	By	Configuration	File/s	Disk space needed to extract
Video Supreme	Scott King	All STs, low res	X_SUPRME.TOS – Self extracting archive	650676 bytes
Utopos	Aggression	STEs, 1Mb, low res	X_UTOPOS.TOS – Self extracting archive	473574 bytes
Double	Lars-Erik Osterund	STEs, med, high res	X_DOUBLE.TOS – Self extracting archive	8562 bytes
STart-it!!!	Christian Ernst	All STs, med, high res	X_START.TOS – Self extracting archive	462156 bytes
Word Writer Deskjet drivers	Anonymous	All STs, med, high res	X_HP_DRV.TOS – Self extracting archive	5826 bytes

other screens also require you to press a key. This is to allow you to manually control how long a screen is displayed while recording directly to a video.

If you create any of your own screens or samples they must be stored in appropriate folders, as Video Supreme expects them to be there when loading. Screens, strangely enough,

go in the SCREENS folder and samples in the SAMPLES folder.

Of course you also need to know how to connect your ST to the video recorder, otherwise you won't see diddly squat. So, here's how it's done. For those using a TV

Using the CoverDisk

Write-protect your CoverDisk now by sliding the write-protect tab so you can see through the hole at the top right corner of the CoverDisk.

In order to fill the disk with as many programs as possible, ST User employs disk compression techniques when placing large programs on the CoverDisk.

These files are termed "archived files" and cannot be directly executed from the CoverDisk. Archived files are identified by their names beginning with X_.

Any files that do not begin with X_ are actually folders containing files which are not compressed.

These uncompressed files should also be copied to a blank disk. Following are a series of step-by-step instructions for using the CoverDisk.

Important: The ST User CoverDisk uses an extended format of 10 sectors and 81 tracks to increase storage space. This means you will not be able to copy the disk using the ST's built-in copying feature.

To make a backup of the CoverDisk, you will need a copying utility, such as FastCopy 3. Such utilities are available from all good PD libraries.

Alternatively, you may use a formatting utility, to format a disk to the same 10 sector, 82 track specification as the CoverDisk and simply copy all files to this.

Using archived files

Note: When copying files, the ST refers to disk A and disk B in its on-screen instructions. Disk A refers to the disk being copied while disk B refers to the disk being copied to (usually a pre-formatted blank disk).

1. Format a disk.
2. Copy the required archived file to the formatted disk.
3. Run the copied archived file. It will now automatically "extract" to its full size.
4. Once complete, delete the X_ filename as this is no longer required. The formatted disk should now contain all the files that were in the archive file.

Normal uncompressed files

1. Format a blank disk
2. Open the required folder and copy all files in the folder to the formatted disk.
3. You can now immediately run the program/s as is.

Highlighting and dragging files and icons

1. Click once on the item, it should turn black (the item is now highlighted).
2. If you keep the left mouse button held down on the item, a dotted outline of the item appears and you may then re-position it by moving the mouse to the required position (effectively dragging the icon) and releasing the mouse button.

If you are new to the ST and did not understand some of the terminology in the preceding steps. There now follow an explanation of some basic techniques needed.

Formatting a disk

1. Place the disk to be formatted in the drive.
2. Highlight the drive A icon.
3. Move mouse pointer up to the FILE menu at the top of the screen and select FORMAT.
4. A box will appear. Click on OK.
5. Another box will appear. Ensure DOUBLE SIDED is selected then click on OK. The disk is now being formatted.

Copying files to another disk

1. Select the file to be copied by highlighting it and dragging it to the disk B icon.
2. A box entitled COPY FILE(s) appears. Click on OK and follow instructions on the screen exchanging disks as requested.

Video Supreme special offer

Are you impressed with Video Supreme? Do you want to save some money on the full version? Then check out these special packages available to all Atari ST User readers.

ORDER FORM

☐ PACK 1 (save £5)

The complete Video Supreme package which includes a professionally printed manual and lots of other utilities to make creating sequences a breeze.

Price: £9.95

☐ PACK 2 (save £9.95)

The complete Video Supreme package PLUS The Video Supreme Screen Maker, which makes creating screens for your Video Supreme sequences a breeze.

Price: £19.95

To order, simply tick the box for the pack you require and send your order to: Goodman International, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffordshire ST3 1SW

I wish to pay by:

☐ cheque/postal order payable to Europress Direct ☐ credit card

Expiry date ____/____ Card No

Name

Address

Postcode..... Daytime Phone

Allow 28 days for delivery

Alternatively, you can phone your order through on 0782 335650

☐ Please tick this box if you do not wish to receive promotional material from other companies

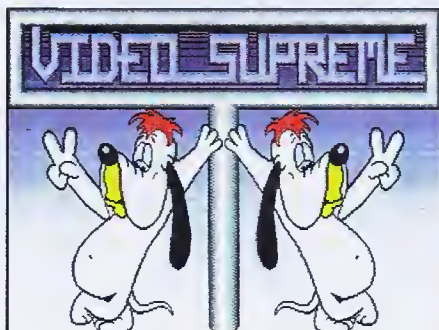
➤ with their ST, simply take the aerial lead from your ST and plug it into the "RF In" socket of your video. Then, take the aerial lead from the "RF Out" socket of your video to the TV.

Switch your TV to the video channel and make sure the ST, TV and video are turned on. Choose a spare channel on your video and tune the video until you see the picture from your ST.

If the picture is good enough you can simply start recording. However, it may be that the picture is less than clear. This is due to the Video and your computer both operating on channel number 36, thereby conflicting with each other.

To get around this, look at the back of the video recorder where you should find a small screw-type adjuster, usually marked as "Ch Adj". Using a screwdriver, turn this screw very slightly in either direction.

Now try re-tuning your video. If you still get



Once you have a picture loaded into the editor



...you can then fade it in or out of view using a variety of special effects, such as this one (called X strangely enough)

a crappy picture, turn the screw a little more and try again. Some trial and error is needed here but it should work.

For maximum picture quality though, it's best to have a lead coming directly from your ST's monitor socket, which is a 13-pin DIN-type affair.

The ideal situation is if your video has a Scart socket at the back. If so, you simply need to buy an ST-to-Scart lead, available from most good computer stores, and connect your ST via this. This gives the best picture quality of all and there's no fiddly tuning involved.

Alternatively, you can make a lead using a 13-pin DIN and Phono plug. The Phono plug then connects to the video recorder's "Video In" socket.

Pin 2 of the 13-pin DIN plug connects to the centre pin of the Phono. Then connect pin 13 to the outer shielding of the Phono. Unfortunately, you won't get any sound using this method.



Utopos

Utopos is a two-player blast-'em-up demo in which you take control of a spaceship to seek out and destroy your opponent. The game is for STE owners only and requires 1Mb.

Controlling your ship is not as simple as it sounds as you have to contend with gravity, using your thrusters to skilfully avoid obstacles, your opponent and his bullets.

The screen display is divided in two showing the area surrounding your ship and your opponents. You each start from your own base and must out-maneuvre each other, trying to get in a good firing position.

While at your base, pulling back on the joystick takes you to an "outfitting" screen where you can change your weapons, re-arm and re-fuel.

Of course, while you're doing this, your opponent may well be moving in for a kill, so watch your tail.

Should you find yourself at your base, with your opponent pinning you down on the

A two-player space ship combat game featuring split-screen display, great graphics and sound

launchpad, you can select Defence from the outfitting screen to take control of your base's gun tower. You can then send a stream of bullets flying towards the culprit.

Your weapons consist of your main gun and a type of grenade which explodes on impact, showering lots of little bullets around the screen (which can damage you as well as your opponent).

You can also change the way your gun fires by going to the outfitting screen and selecting options such as FB (for forward and back shots) or Twin (for double barrel mayhem) under Weaponry.

Utopos is shareware and to get the full game, just send off a paltry £6 to the author.

Double

In medium resolution you have a screen size which is 640 pixels wide and 200 pixels high. High resolution is 640 pixels wide and 400 pixels high. Such resolutions are ideal for applications like word processors and desk top publishing.

Would you like to increase these resolutions for even more space? Well then, simply copy the DOUBLE.PRg program to your AUTO folder and reset your computer.

Double will not activate unless you hold one of the SHIFT keys down while your STE boots up.

Once activated, you will have either a

A neat utility for all STE computers which doubles the vertical resolution of medium or high resolution screens

medium resolution of 640 x 400 or if you are using a high resolution monitor, you get a resolution of 640 x 800!

The extra space is available as you move the mouse pointer to the bottom of the screen, whereupon the screen will automatically scroll down to show the extra space.



It's lift-off time from the base and time to track down your opponent (that's me on the top half of the split screen display)

Aha! Found the blighter. Now to dispense death with a hail of bullets from my big gun

STart-it!!!

Boot managers are worth their weight in gold. Having to constantly rename and de-activate certain AUTO folder programs and accessories by hand is a real pain.

With a boot manager, all this is handled for you. You can even specify the order in which programs in the AUTO folder are executed. There are a few notable boot managers around, such as the shareware utility SuperBoot and the commercially available Xboot.

STart-it!!! is just as good as these and offers as many features, including sampled sounds and graphic backdrops.

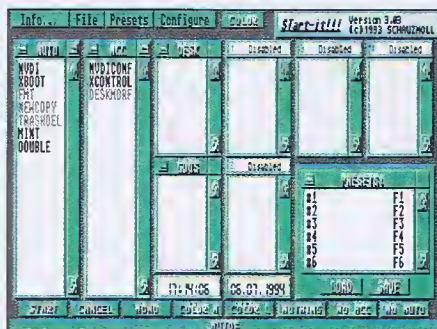
STart-it!!! also features a colour version of David Becker's ZeST interface, which is a collection of GFA source code providing an interface similar to that used on NeXT computers. In other words, it looks very nice indeed. Previously, the ZeST interface only

A great boot manager utility to help organise your accessories and AUTO folder programs, featuring a colour version of the GFA ZeST interface

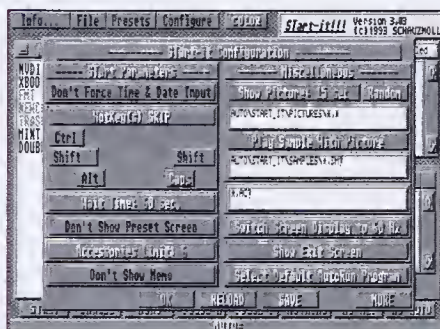
worked in monochrome, but the author of STart-it!!! – Christian Ernst – has vastly modified the original ZeST source code to work in colour. The modified source code is available from him for any interested GFA users out there.

STart-it!!! is shareware, so if you find yourself using it regularly, be sure to register your version with the author.

For instructions on installing and using STart-it!!!, refer to the START_IT.DOC file.



With its colour ZeST interface, STart-it!!! is one of the most impressive looking boot managers



As with its competitors – SuperBoot and Xboot – STart-it!!! can be configured to your personal tastes



If a fault turns up...

With thousands of disks being duplicated each month, a few will inevitably be faulty. Fortunately, we can help you. Send the faulty disk to:

PC Wise, Dowlais Top Business Park, Merthyr Tydfil, Mid Glamorgan CF48 2YY.

A replacement will be sent free of charge but please allow 28 days for delivery.

If it wasn't for some very talented shareware authors, the ST games scene would be a lot duller. So, a big round of applause goes out to the authors/groups who support shareware.

If you would like to see more shareware games for the ST, be sure to support these people and send off the suggested registration fee. You now it makes sense.

CoverDisk hotline

As from this issue, the CoverDisk hotline will no longer be available. Nearly all callers to the hotline were having CoverDisk problems which were due to their unfamiliarity with the basics of using an ST, such as copying files and formatting disks.

Although CoverDisk instructions were printed every month in the Disk Pages, a large number of callers were absolute beginners and had difficulty in understanding the instructions.

To address this problem, we will be looking at running a regular beginners tutorial feature in future issues, covering the basics of using the desktop.

May we also remind readers who have faulty disks that they should be returned to the duplicator's address listed in the Disk Pages.

Any other CoverDisk enquiries or complaints need to be addressed to Customer Services, Atari ST User, Europress Publications, Europa House, Adlington Park, Macclesfield SK10 4NP

Word Writer Deskjet drivers

A collection of HP Deskjet printer drivers for Timeworks' Word Writer word processor

On the October '93 issue of Atari ST User, we gave away the complete version of Word Writer 2 from Timeworks. For those of you with Hewlett Packard Deskjet printers, here are a few drivers which will allow you to print out your documents without any problems.

To instruct Word Writer to use any of these drivers as the default driver, which is loaded automatically when you run Word Writer, simply rename your preferred driver to DEFAULT.CFG (after renaming the current DEFAULT.CFG driver to another name first).

Introduction

I'm a virtual novice when it comes to computer art packages, but I do understand the laws that govern the success of any picture.

My aim is not to review these packages in the sense of fancy tools or facilities to generate customised graphics, but to test them out for common sense use with their brushes, colour and so on. At the same time I shall also be giving some tutorial to help readers over the basic aspects of any piece of artwork.

In part one we have a very basic look at Cyberpaint and I offer a little advice on the role of colour and the palette.

Are computer art packages the future medium for conventional paper artists? Can an oil and water man find any use for such packages? David Laraso goes in search of answers

Art for art's sake

Palette selection

The most time consuming task involved in producing a picture tends to be the palette creation. I've known people who have spent a week just setting up their palette, so don't expect to get yours right in five minutes.

When you're selecting colours for your palette, each colour must be right. This sounds rather obvious, but if your selections are just slightly wrong the hues will not be in(?)compatible.

You'll feel that something is wrong with the drawing or painting rather than one of the colours. It's too late to find out that one of your colours is wrong after spending hours on your picture.

Adjusting one of your colours can adjust the whole relationship of your picture. The best advice is to take time to adjust your palette to the best shades.

But I haven't even picked up my mouse yet

You may not have drawn on a computer before, but the concepts are not that complicated. What will be difficult is learning the discipline required.

The most important lesson is to learn to look around you at your world. Look at how things are constructed and how everything can be broken down into very basic shapes.

Examine the relationship of the parts to the whole. Although simple shapes are the best starting point, don't be scared of complicated forms, because they all are just groups of simple shapes merged together.

Do not accept what you see around you but look and understand it. The key is to train your hand to record what you see, which is only a matter of practice.

As a would-be artist whose enthusiasm exceeds his talent, I have always steered away from computer art programs. Many of the reasons for giving this pixelated environment a wide berth lie in distinct differences in the approach one must take.

Art students are taught a completely different set of ideals to the ones which apply to computer art. This sounds a contradiction in terms because laws of colour, composition, perspective and position never alter.

But the way in which the two mediums reach their ultimate conclusions are glaringly different. For example, the classic school of water colour painting demands that the artist builds the painting by development of layers, a technique a computer would never employ.

A water colour artist starts with the lightest colours and builds them up. Eventually these bring tone, can generate shadow and give a painting depth or a feeling of three dimensions. Conversely, when using oils or acrylics the painter must reverse the process and paint from dark to light, with the highlight being the very last addition.

There are other techniques that artists

employ concerning the use of brushes that would seem on the surface to be impossible for a computer to mimic. For instance, many artists use "dry brushing" to lift wet water-colour paint from the paper and so create highlight.

To all intents and purposes, these processes and others like them do not exist within the realms of home computer art. But computers like the Atari ST can, when properly used, replicate some of the techniques I have mentioned.

Of course, to give the home computer credit, there are many tools within art packages that can render images that the

Sitting in front of a monitor with the disk drive buzzing itself into oblivion, there are glaringly obvious differences that strike you before the program has even had the chance to load.

Most obvious is the mouse. The best friend to the accomplished pixel artist bears absolutely no resemblance to the shape of a brush and responds with a totally different feel.

The monitor screen too is an alien at first. While many artists use easels to produce their work, just as many work practically horizontal, using the vertical axis purely for washes (the technique a painter uses to apply their lightest base colours on water-colour work) which benefit from gravity.

Another difference between conventional methods of painting and computer art is the matter of composition.

In most paper artists' cases, the size of canvas or paper used on a piece will have been determined in the artist's mind and the composition will fall into place around this.

Computer art software, while allowing the user to link segments together, doesn't give any insight into the composition of the piece.

If it seems as though I'm being pedantic, let me tell you that the difference between a piece of art being a success and a failure can lie in the composition. The placement of any one object in a picture that doesn't allow the eye to follow on naturally from it around the piece can ruin it.

Conversely, an object, while important to the piece, if placed too centrally, will always draw the eye towards it and unfortunately its overbearing nature will mean the rest of the piece is lost.

With these and other questions begging to be asked, I decided to mix the metaphorical pallet of Atari paint packages and discover what advantages, disadvantages and problems the absolute novice with an eye might encounter.



paper and paintbrush would take months to generate.

Until recently I myself had never even cast so much as a compositional glance towards an art package. Call it intrigue, a chance to scrutinise and find out whether paint packages contain anything of any credence or just an overriding feeling that one should at least give these packages a chance, but that was to change.

As a beginner, familiar only with traditional canvass, Bockingford water-colour or varying grades of cartridge paper, the very idea of using computer software to paint feels quite unnatural.



Although primitive, the sky demonstrates the first steps to dithering



Cyberpaint • Antic Publishing

Cyberpaint comes equipped with a handy little 120-page manual. At first glance this is a rather daunting proposition, but its language is fairly straightforward and to the point.

The manual is divided into two distinct sections: reference and tutorial. While the reference section is extremely important for the accomplished pixel artist, beginners will find that the tutorials will become their bible if they are to progress.

That said, I dipped straight into Cyberpaint's pallet and experimented with its fonts and brushes. Moving your mouse over one of the 16 pre-set brushes and clicking activates its use. The majority are unlike any formal paintbrush anyone will have seen, and come in a wide array of shapes and sizes.

These vary from squares and dots all the way through to what looks like a series of perforations, and can be used to achieve shading effects, which we will discuss in a short while.

Aside from the standard brushes, you can construct a custom brush. Cyberpaint's brush menu contains a 'Get Brush' option which lets you grab a small portion of the screen. For this to work you must have grabbed a portion of the screen that contains, at the very least, some of the default background colour.

Once instigated, this brush is added to your brush menu, and you can select it at your leisure. Also, using the zoom facility from the tools menu allows you to construct some very complicated custom brushes.

This all sounds very handy, but when I attempted to find any use for it aside novelty value, it turned out to be of little help to any drawing.

Perhaps the most important aspect of any paint package must be the pallet. Cyberpaint's is found within the colour menu and allows the user a maximum of 16 colours at any given moment. A further 500 plus colours can be generated using the palette sub-menu. This sends you to a display which can be adjusted by the use of two boxes.

The box marked RGB (red, green, blue - the primary colours) contains three sliding bars. Each bar is responsible for degrees of one of the three primary colours and mixing combinations of these produces varying intensities.

The second box is called the HLS, and is responsible for hue, luminance and saturation. The hue is just another word for colour, but when a colour is generated by the hue it loses none of its purity (the amount of grey in the colour).

This system acts in the same manner as the artist's colour wheel, the difference being that Cyberpaint uses a numerical system to indicate differences in tone.

The big question though is whether Cyberpaint can operate in the same way as an artist's colour wheel, and whether it can blend

The crystallise effect works wonders on circles





The palette where Cyberpaint's 26 colours can be selected

Cyberpaint's menu bar displaying your colours



tones in the same way as the traditional artist's method.

Cyberpaint has two commands which can help the budding artist achieve such things as depth of field. These are the range (which should be thought of as a blend option) and tint commands.

After the user has selected two colours, the range option lets Cyberpaint select the best variation of intermediate colours which fall in between the two originally chosen.

Tint performs a similar task, but after you've selected the two colours which require blending, Cyberpaint increases the RGB values from left to right by one increment at each of the 14 positions.

If you wanted a range of blue from dark to light so you could paint sky you would select a dark hue of blue at one end of your scale, white at the other, and then lighten your blue very gradually.

The theory is that having this range of blues will enable the artist to bleed the hypothetical sky scene from dark blues down to a very pale horizon.

In reality, even when using the zoom facility, Cyberpaint's ability to perform this vital task is limited. The reason for this is that the pixel sizes that Cyberpaint operates in are just too large, and leave a noticeable difference in tone, giving a lined effect.

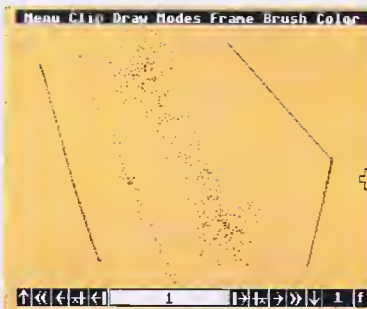
This same rule is true when you attempt shading. An abrupt shadow cast by a strong sun is no problem because the contrast and change in tone takes place instantly. But if you consider the intricate shading and delicate highlights contained on a human face, Cyberpaint's tonal contrasts have no chance of generating any realism.

The basic problem is that Cyberpaint operates within the boundaries of 16 colours while to achieve smooth changes in tone, you need to experiment on a package that uses a 256-colour pallet.

That said, there are other ways of achieving shading. A pencil artist will sometimes use a technique called cross-hatching (see pic). This is possible using Cyberpaint's brushes, but is an extremely time consuming principle to execute.

On a brighter note, Cyberpaint contains several features that an artist could never hope to accomplish in a short time. It allows you to create any polygon or circle very quickly, has animation facilities and some fairly unique effects.

The effects are used to distort or change an image that has previously been drawn — something a paper and pencil artist couldn't do in his wildest dreams. The most impressive of these options is the crystalise effect. It's much too complex to explain here, but works best in conjunction with a simple shape like a circle.



Different effects to draw with make Cyberpaint slightly more versatile



More colour please

The more colours available on your computer, the better the quality of your pictures will be. On standard ST computers, you are limited to 16 colours from a palette of 512, which by today's standards is somewhat limiting.

The STE range of computers improves things slightly by giving an increased palette of 4096 colours to choose from, although you still only get 16 colours on screen at once.

There are third party hardware boards, such as Crazy Dots, which are hardware upgrades that increase the colour capability of standard STs, but, they are not cheap.

With the release of Atari's Falcon computer, but high quality graphics finally became available to the average user as a standard feature.

In its highest colour mode, called TrueColour, the Falcon is capable of displaying over 32,000 colours chosen from a palette of a staggering 16.8 million colours. This kind of graphics quality means photo-realistic images can be displayed and manipulated.

This puts the Falcon way ahead of many PC's which use 256 colours in their games.

The two pictures shown here illustrate the difference in quality between 16 colour (bottom) and 256 colours (Top). As you can see, shading is more subtle giving a superior appearance to the picture.



TUMBLEVANE PDI

6 West Road, Dept STU, Emsworth, Hampshire, PO10 7JT
Telephone: Emsworth (0243) 370600

DISK PRICES:
£1.75 each.
unless otherwise stated

UTILITIES

- UTA01: THE HITCHHIKERS UTILITIES, which includes a document display, BOOTDRIVE, select which drive to boot from. BOOTWAIT, boot up both the ST and hard drive at the same time. BSSS, store boot sectors. CUSTOM, allows you to create disks of almost any format. DISKAT, database your collection and many more. With full manual.
- UTA02: STICKER 3, create labels for your disks with a selection of icons that printout onto the label.
- UTA03: FASTBASE DEMO, ICON, change your desktop icons. HEADSTART, auto boot any type of program from an auto folder. ON SCHEDULE, work schedule program with bells a very good printout routine.
- UTA05: SUPERCARD V1.3, an index card database, easy to use and very fast search feature. Comes with a database of game cheats. CHEF, an electronic cookbook with 300 recipes each with cooking instructions and ingredients.
- UTA19: TLC BOOK, an excellent on line address book and date reminder which holds up to 500 names and addresses. Has a good printout routine. DATABASE, a good database construction kit. SUPERBOOT, allow you to create custom bootup disk. TARADESK, a good PD desktop replacement program. COCKTAIL SELECTOR, a database of cocktails (600+).
- UTA06: FASTCOPY 3, A-COPY, PRO-COPY and several other copying programs and utilities. ZAPMENU, a great way of launching programs from the desktop. ARCSYS, one of the better arc progs. PACK ICE, the other arc program.
- UTA28: AWARD MAKER, a useful program for producing award certificates. Design your own or use one of the 120 already on the disk.
- UTA34: DB MASTER 1, this has got to be the best answer to your database problems, design and configure your own! Very easy to use.
- UTA36: DATA EDITOR, enter your data and the program turns it into easy to read graphs. PIE, BUBBLE, OPPOSED BARS, FLOATING BAR, 3D BAR, STAR BAR graphs can be produced, stored and updated at any time. Many students have used this program for their course work.
- UTA37: WG DATA, another database, but for younger users to learn how to construct and use a database. For the 11+. DATABASE CONSTRUCTION SET, a powerful program that allows the user to design your own way of processing information. SANDP, a newsletter/magazine program.
- UTA39: IDEALIST V3.1, a versatile program for printing out text and offering lots of helpful functions to use your print in clever ways, 4 selectable sizes, up to 9 columns, separate output of fonts and pages, editable headlines and includes fonts for dot matrix and laserjets.
- UTA40: CALAMUS SUPPORT DISK, METACON, converts Calamus fonts to Text metafonts. FASTPRTR, accessory to speed up printing to the HP laser. GUNTH, saropie graphics in outline format. LASIABEL, template for printing 3.5 inch disk labels. CANON printer driver for the BJ10E.
- CAL_FNT text file describing Calamus font format. HPDIPATCH, a patch for the HP deskjet printer and a few other small programs.
- UTA43: A disk full of accessories and utilities, ideal disk for those who do not wish to buy a disk for each type of utility.
- UTA45: MAILMERGE, a good program for those with a WP package without this utility.
- UTA46: INVENTORY PRO, an easy to use inventory system and stock control for the small business.
- UTA48: SAGROTON V1.14, THE VIRUS KILLER in the PD world.
- UTA51: 70000 word dictionary, replace your standard spelling checker with this and you will be onto a winner.
- UTA52: FOOD AND WINE MENU MAKER, an excellent database that stores and prints out a menu for both wine and food.
- UTA53: GERMAN TRANSLATE, one of the better translation programs that makes sense of those German documents on some PD disks. Does it all for you.
- UTA55: HP CHROME, prints colour pictures in Degas and Neo format utilising deskjet printers. HYPERBASE, a multi media database, you can create windows holding text, graphics or sound and link them together. CLIPART, for use with Hyperbase. UNPRINT, a Hi res Degas Elite printing program for 24 pin printers.
- UTA56: HP DESKJET UTILITY DISK 1, printer drivers for use with 1st Word. ENVELOPE PRINTER, JETLABEL, JETSET, set parameters on your deskjet. LASERJET, print at 300 dpi and loads of other useful utilities.
- UTA57: ASTUBANK, a personal accounts program that will tell you how much you can spend in any one month.
- UTA58: HARD DISK UTILITIES, everything you need to look after and maintain your hard drive.
- UTA60: MANUAL MAKE, a utility for putting together neat and tidy printed manuals.

STARTER PACKS SPECIAL PRICES

Any 5 disks for
£6.99

Any 10 disks for
£12.49

GAMES

- Towers Dungeon Master Game. 2 disks. £2.95.
- GM13: FMC trading, space trading game. Laserball & Regatta, sail against 10 other countries.
- GM21: Llamatron & Revenge of the Mutant Camels, as above but from the Master of such games, Jeff Minter.
- GM26: Airways, Flight Sim (not a blaster).
- GM27: Blaster, defender type game. Wheel of Fortune, as per the TV show. Monopoly & Pentominoes.
- GM38: Pipe Perfect, build your pipeline before the flow starts.
- GM40: Tennis, Plumb Crazy, build a pipeline again. Virus Killer, a 50-virus killer.
- GM42: Penguins, a Lemmings type game with 40 levels. Great fun, good enough to be a commercial game.
- GM43: Mystic Well, a very addictive Dungeon Master game from the USA with loads of levels and puzzles to sort out.
- GM48: Crossword Editor, create and solve crosswords.
- GM52: Battle for the Throne, a great RPG that takes some time to complete.
- GM54: Bog, Fuzzball, Trivia, Time Bandit, Wall Street, Quizwiz & Yahtzee. Quizzes and blasters all on one disk.
- GM69: Ozone, an award winning platform game that has everything in it, including a hang glider.
- GM76: Master Break, good Breakout clone. Atom, Blaster & Spaceball.
- GM75: Drachen, a 3D Mahjong game. Super Game, a good track and field game.
- GM78: Violence, a very good Xenon type shoot-em-up game.
- GM87: Pub Games, Pool, Darts, Cribbage, Pontoon and Checkers.
- GM88: Hunt for Grey November, control your hunter-killer plane in its search for rogue subs.
- GM97: Fatemaster, a great arcade romp on an alien planet with an alien super spy. 1 Meg.
- GM106: Mindlock, another great quiz game from D. Cobbleclik. 1 Meg.
- GM109: Colour clash, from the same people who gave us Fatemaster, this time you need to use the grey matter as well as the trigger.
- GM113: Galaxians & Mrs. Munchie, two blasts from the past. A Pacman clone and Space Invaders given a revamp.
- GM114: Course Angler, a good game and a fun way to learn how to fish, no sitting around for hours once you know.
- GM120: Brain Damage, D. Cobbleclik at his very best. Watch your brain cell count drop as you fail to answer the questions.
- GM121: Walls of Illusion, a new Dungeon Master type game with commercial quality graphics and gameplay. THIS IS A MUST HAVE.
- GM123: Bludgeon: Fantasy D&D combat game.
- GM124: Startrek: The Klingon war battle simulation.
- GM125: Geofran: Guide a lunar probe and battle with underground forces.
- GM128: Software Projects: Software Company & Simulation - develop your company.
- GM129: Tecmaroid.
- GM132: Quest for Knowledge.
- GM133: Snacmac - the best Pacman clone.

INKJET REFILL PACKS

- TWIN REFILL PACK FOR DESKJET AND BUBBLEJET
BLACK £10.00
COLOUR £11.50
- TWIN REFILL PACK FOR THE HP HI CAPACITY
BLACK £16.75
COLOUR £18.00
- TRI COLOUR PACK
A tri colour pack will recycle the three colour cartridges for the HP 500c or 550c three times... this would cost you around £100 in originals.
Each pack costs just £21.00
- We also stock bottles of ink. If you already have a syringe why not just purchase the ink?
- 60ml bottle of ink. Refill Canon BJ printers four times or HP 500 two times for only £8.00
- 500ml, 1 litre and 5 litre size bottles also available. Please call for a quote.
- CLEANING KITS
Each cleaning kit will clean out three cartridges ready for new colours to be injected. Each pack costs just £4.95

ART

- AAG01: PALETTE MASTER art package. DEGASAVE, save the screen in Degas format. MANDEL, Mandelbrot prog. Plus a few other small progs.
- AAG04: DALI V3.1, art package from France. Not much in the way of instructions.
- AAG05: CRACKART V1.0, almost the last word in art packages comes with complete English manual. 1 Meg required.
- AAG06: FRACTAL ZOOM, probably the fastest generator of fractals around. Full manual on the disk.
- AAG07: A disk full of Fractal programs and utilities. A 3D CAD program. Full manual on disk.
- AAG10: ST CAD, runs in Med or Hi res. DBANNER, printout 5 inch text along printer paper. REMINDER & MEMO & LOOKER.
- AAG11: ANIST, a great animation program that once sold for over £80.
- AAG21: Picture Converter, a complete disk of picture converters. SHOWTRIX, display your art work with different fades between each one.
- AAG22: PUBLIC PAINTER, an art package for mono monitor owners. On disk manual.
- AAG26: PICTURE WORKS, load, save various picture formats and do amazing things with them.
- AAG27: MINIDRAFT V1.10, easy to use CAD prog.
- AAG28: MONOJC Viewer, copy clipart, add text and draw simple clipart, you can also print out and save in most formats.
- AAG29: PAINTPOT, a simple and easy to use art package for half meg owners.
- AAG35: CREATIVE TITLES, create titles for your Christmas videos, add the professional touch.
- AAG38: CRACKART V1.36, the latest version of this excellent art package with several new features. 1 Meg.
- AAG39: ATARI IMAGE MANAGER, whatever you need to do with images this is almost sure to do it. 2 disk set.
- AAG50: 52.5 disks of Wedding Clipart. £4.50.
- AAG54: Kozmic 4. Create psychedelic patterns.

SPRITE WORKS

- A powerful new set of commands for GFA Basic versions 3 and above from Organise Chaos.
- Turn GFA Basic into a games language with Sprite design & two MAP designers.

£7.00

EDUCATION

- EAO01: Easter Egg Hunt for children 5-12 years. Find all the Easter Eggs & take them through the magic door to win. Good fun.
- EAO01: PERFECT MATCH, question and answer card game, MATHS TEST. For the under 10's. QUIZICAL, a good general knowledge trivia game.
- EAO02: BODY SEARCH, designed to help children learn the human anatomy as required in elementary and junior school. THE SEARCH, a computer aided enquiry program. Search the village for info about the Gliggs family. MATHMAZE, a very good maths program that grows with the student. TRIVIA, another good general knowledge test, some of the questions are based on the USA.
- EAO06: SHIPWRECK, an excellent maths program that combines graphics and easy and hard levels of play. The child's interest is held by turning the learning process into a game where correct answers help the character on the screen to escape his fate. HANGMAN, the old school room favourite that helps with spelling.
- EAO07: ABOUT THE HOUSE, control a butterfly as it moves around the house. As it lands on various objects a description is given and some animation takes place. ME, displays four pictures of a task that must be placed in the right order, once this is done the scene is animated. Help the child understand that most tasks need several steps to complete.
- EAO09: CHUNNEL, a good French/English tutor. SPANISH VERB TUTOR, this program is designed to help you learn, revise or check the proper conjugation of Spanish verbs, can be initialized to communicate in French, English, Spanish or German.
- EAC10: NOAHS ARK, a good game for teaching children spelling and word recognition. SPIDER SPELL, a very good spelling aid for younger children.
- EAC11: MATHS MADE EASY, for the younger ST user, the program teaches maths in all four disciplines by talking to the user thus keeping interest levels high. GEOGRAPHY QUIZ, one for the slightly old user, the test is based on flags or capitals of the world.
- EAC18: THE WORLD, an excellent program that teaches you about and quizzes you on the countries of the world.
- EAC19: PLANETARIUM, if you are into astronomy then this is for you. Pick a star from the map and click on it and all the info you want is there. It will also animate past or future events. Full manual on the disk. MONO.
- EAC20: TELLTALE CHEMISTRY by E. Mills Bsc, PhD. An interactive program on the basics of chemistry, the program relates to GCSE grades A, B and C, good graphics & explanations of atomic structure, electron structure, formulae compounds, etc.
- EAC21: CIA WORLD FACTBOOK, a four disk set of everything you want to know about over 240 countries. If you want to know how many people live in Albania, what the birth rate is, death rate, who they are upset with, where they sell their products or just about anything else then this is for you. A document display is also included on the disk. £5.00 for the set.
- EAC33: Picts to Parliament.
- EAC34: KV add up.
- EAC35: Benjamins ABC.
- EAC36: Maths Circus.
- EAC37: GCSE Maths.
- EAC38: Animal Sound.
- EAC40: MOLSYS.

DTP & WP

- WPD01: ST WRITER ELITE V4.1, an excellent WP package that works in all three resolutions.
- WPD02: EASY TEXT + DEMO, a fully working demo of this DTP program but you can only print out the top quarter of any A4 page.
- WPD03: TYPING TUTOR, teach yourself touch typing with this program, several levels of lessons have been built into the program.
- WPD05: FIRST WORD, an excellent WP program that features WYSIWYG on the screen. 1ST WORD UTILITIES, help with 1st Word. DOUBLE TTP, print your text in columns. LARGEPRINT, lets you printout in large text.
- WPD12: OPUS V2.2, a very good spreadsheet program with an excellent chart printout routine.
- WPD15: PRINTER DRIVERS for 1st Word users covers just about every make of printer, comes with full installer & instructions. WORD COUNTER. WPTOOLS, a selection of WP utilities for 1st Word.
- WPD18: PACESTREAM FONTS, Postscript screen fonts for the following fonts: Artistic, Creative, Hudson, Letter, Gothic, Oriental, Saturn, University and Roman.
- WPD19: PRINTING PRESS V3.10, the closest thing to a full DTP program in PD. Also on the disk is a picture converter.
- WPD22: PRINTING PRESS EXTRA'S, a disk for use with WPD19 containing extra fonts and clipart.
- WPD23: DB WRITER V1.8, a very good WP program for Hi res users which can be used by both half meg and 1 meg machines. A manual on the disk gives a good guide to the program.
- WPD24: DB WRITER SUPPORT DISK, includes a comprehensive thesaurus and a selection of dictionaries covering Medical, Legal, Computer and Biblical terms. You can also add your own with a utility on the disk.
- WPD25: A utility for designing and downloading fonts to the STAR NL10 & LC10. Hi res only with loads of fonts ready to use. Can be used with an emulator.
- WPD26: GUTENBERG PRESS, allow a 9 pin dot matrix printer to be used as a NLQ printer, load in ASCII files and print them out in high quality format and a selection of fonts.
- WPD31&32: Gem fonts (2 disks).

MUSIC AND MIDI

- MUM01: ACCOMPANIST, a 16 voice sequencer for use with any model of ST, with room for over 10,000 notes, multi-recording with separate MIDI channels and a wide range of editing utilities.
- MUM02: IN CONTROL, a user definable MIDI controller with over 20 sliders that can be programmed to control your midi instruments. SCONVERT, compress or expand sound samples.
- MUM18: 1632 voices for use with the Yamaha DT/TX series of 6 operator synths with a file reader for loading the voices directly via the midi. A varied and useful range of voices on the disk.
- MUM19: TRI-SOUND SEQUENCER, a chip/digi-chip 3 channel music sequencer.
- MUM20: SAMPLE EDITING DISK, a disk full of useful programs for editing, sampling and converting. Also on the disk is a chip music tracker to create your own music.
- MUM21: MIDIDRUM & MIDIDPLAY, two useful programs for creating sounds with a drum machine and Midiplay is a basic sequencer. German documents with English version on disk. 1 meg and Mono.
- MUM22: TX81Z V2.1, a mouse driven Yamaha TX81z editor. MIDIMOVER, a powerful midi file converter from Hybred Arts Fireware.
- MUM24: ALCHEMIE Jr V2.22, this has got to be one of the best musical sequencers for the Atari anywhere. Comes with over 200 tracks for your use and has far too many features to list.
- MUM57: FINAL SCORE, a graphic based fully WYSIWYG score writing program from Mainstream Music. Draw staves, line squares, 5 selectable score fonts, print preview mode, etc. Printer drivers now added for most makes of printer.
- MUM58: ROLAND 'D' SERIES SOUND BANKS, a bank of tones for the D5, D10, D20, D110 and GR synths.

A CATALOGUE DISK with our complete range of software is available for just 50p with any order or for £1.00 without an order.

The disk has over 200k of free PD and a selection of secondhand commercial software for sale.

CRACKART V1.36

Now for the first time with full English Manual. Ask for AAG038.

ROOTFINDER V.2

Now with graphical map of Britain with superb magnification. Ask for MISC015

GERMAN TRANSLATE NOW UPDATED

Superior automatic translation.

AWARD MAKER
now with full instructions. 286 awards on disk.

PRINTING PRESS
Plus Support. Compressed on one disk. English version £2.95

Imagecopy 3 is the latest version of a highly acclaimed screen grabbing, conversion and printing utility written by Jeremy Hughes, of Fontkit Plus fame, and sold exclusively through the FaST Club.

It runs as an accessory or as a stand-alone program and supports almost all the popular makes of colour printer, providing a high degree of control over many aspects of output, and has extensive support for various graphics formats. It also features tried and tested support for all the Falcon colour modes, as well as large and virtual screens.

Colour images are neatly dithered to full screen for monochrome monitors and an unlimited number of images can be displayed in movable GEM windows, operating system support permitting.

So if version 2 is this good, how can version 3 be better?

First of all it has enhanced support for both mono and colour printers including the HP Deskjet, HP Laserjet, Epson-compatible 9 and 24-pin printers (such as the Star range), NEC 24 pin, Epson Inkjets and Bubblejets in both IBM and Epson emulation modes. Colour composites or separations can be printed, with or without the black component, and there are dozens of options for colour dithering and halftone angle.

FORMATS

Colour balance can be altered using sliding bars and the amount of each CMYK component can be adjusted if necessary, plus saturation, brightness and contrast. In other words, you get more control over your colour printer than you ever thought possible.

Imagecopy can load and view a large number of graphics files, including almost all the Atari-specific formats as well as many from other platforms. The list covers Degas, Tiny, NEO, Spectrum, Calamus Raster Graphics (CRG), Doodle, Portable Bitmap, Pixart's proprietary format, RSC, TruePaint (TPI), PCX, GIF, Prism Paint (PNT), IFF, TIFF, Windows Bitmap (BMP), Targa, and JPEG. PhotoCD support may be added depending on demand.

In addition, Imagecopy 3 can save files in many more formats than before, including Degas, GIF, IFF, XIMG, PCX, PNT, Targa, JPEG, TIFF and BMP.

There are several options for many of the file formats. For example, GIF files can be saved with any number of colour bits from 1 to 8 and mapped to the

Andrew Wright looks at the latest release of one of the most popular Atari graphics utilities – now in its third incarnation

The big 3

current palette. TIFF files can be saved uncompressed or with RLE (run length encoding) or LZV compression, again with any number of colour bits from 1 to 24.

Any JPEG quality can be specified too, although the recommended setting is between 75 and 95. Support for the Brainstorm decoder hasn't yet been implemented though, due to delays in obtaining documentation.

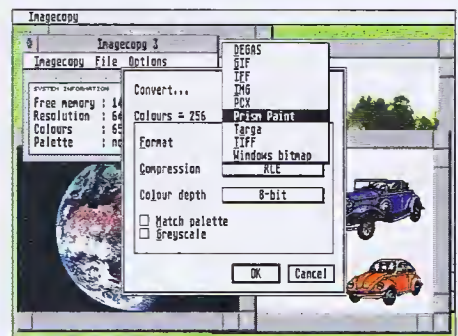
A number of things have been greatly improved in the new version of Imagecopy. Dithering is better and loading files appears to be slightly faster, particularly with compressed files like GIFs. One notable new feature is the configurable slideshow that uses the Falcon's overscan mode.

BATCH MODE

Another particularly nice feature is that multiple files can be loaded using two methods. Firstly Imagecopy now uses the protocol developed for the Selectric replacement file selector, allowing several files to be selected in the file selector window, and then automatically loaded or converted one after the other.

Secondly it is possible to create list files using the supplied standalone utility both for loading and conversion. In this way you can create a list of all source images and tell Imagecopy to view, print or convert them one after the other in a kind of batch mode.

Imagecopy 3 also has an updated interface – similar to that in Textstyle – with easily accessed keyboard shortcuts. The appropriate key is always underlined in the menu so that you never need



On the Falcon, Imagecopy really comes into its own

learn the appropriate sequence of buttons. You can also define your own as in later versions of TOS. Support for Crazy Dots graphics cards is included as well as VDI options for non-standard displays.

The manual wasn't available at the time of review but it will have almost doubled in size by the time Imagecopy 3 goes on sale in the next few weeks. As the previous manual is like an encyclopaedia of graphics on the ST, I'm sure nobody will be disappointed!

Imagecopy has certainly proved itself to be one of the most successful Atari graphics utilities there is. Without a doubt version 3 takes it out of the utility league and almost into the realms of a complete graphics application. With its batch conversion of files, excellent slideshow mode and new keyboard-friendly interface, it has matured into an essential Atari program.

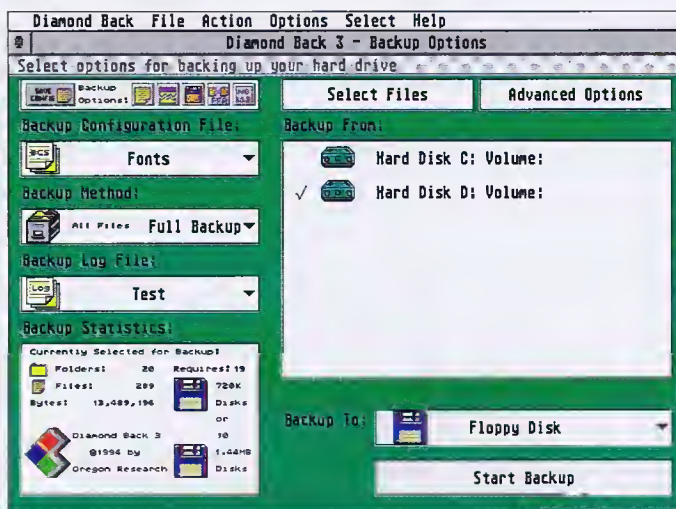
COMPREHENSIVE

Although the screen grabbing features are primarily for journalists (show me an ST magazine that doesn't rely on Imagecopy for its screenshots!), programmers and manual writers, it has plenty to offer the casual user who needs comprehensive conversion capabilities, highly configurable colour output and the ability to view images whenever the need arises. In a nutshell, it's a program no serious Atari user should be without.

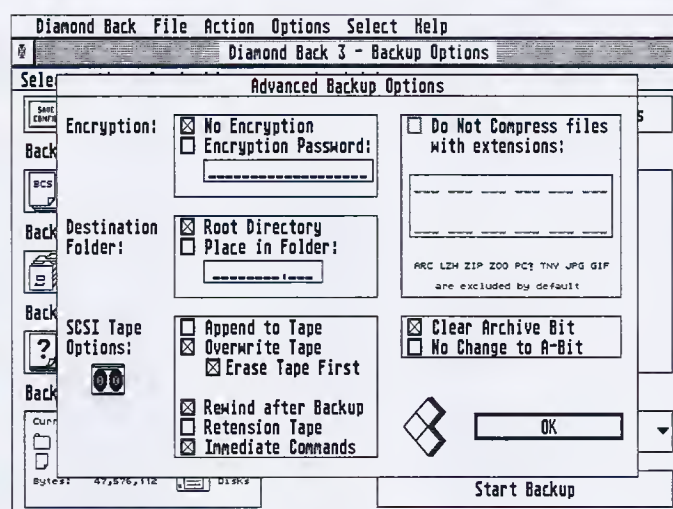


In ST low resolution, there isn't much room

BOTTOM LINE	
FEATURES	Excellent Good Average Bad Appalling
Great for just about everything to do with images	
EASE OF USE	Excellent Good Average Bad Appalling
Simple to install and use and comes with a superb, informative manual	
VALUE FOR MONEY	Excellent Good Average Bad Appalling
Definitely great value for money	
Product: Imagecopy 3 Supplier: The ST Club, 2 Broadway, Nottingham NG1 1PS Telephone: 0602 410241 Price: £29.95 Configuration: Any ST/STE in any resolution	



Diamond Back's main backup menu



Even in ST high resolution, the interface is impressive

"I'll never happen to me" is a thought that runs through all our minds at some point whether it's about crossing the road or winning the pools. Now I'm perfectly prepared to believe that winning the pools will never, ever happen to me but let's face it — a car crash or some other mishap might be just round the corner.

While most accidents are best left unimagined, I can almost guarantee that pretty soon my hard disk will crash or corrupt. That's based purely on experience because it has done so several times with monotonous regularity and the consequences, while far from catastrophic, have been extremely embarrassing in terms of missed deadlines. I can still remember the time I had to write a 3,000 word article again from scratch...

There are various strategies you can adopt for safeguarding the data on your hard disk, whether it's a saved game, your favourite PD program or some important business files.

Firstly you can take more care of your hard disk by using defragmenting utilities such as Diamond Edge or ICD Cleanup. This means the chances of a disaster are lower, but in some cases it can actually speed up the process. No utility is 100% safe, particularly as bugs in early versions are rarely publicised and you might well be using a version that's had several important updates since.

Secondly you can back up your data onto floppy disk, tape drive or a second hard drive, perhaps even a removable one. There are various ways of doing

Andrew Wright test drives Diamond Back 3, a new hard disk backup utility

this. You can use a PD utility like The Vault or Turtle, old but reliable programs that do a good job for thousands of users. Alternatively you can do it manually, by copying all your important files using the desktop or dedicated file managers like Maxifile. Or you can get Diamond Back, a comprehensive backup program with more bells and whistles than you'll ever need.

PROTECTION

Backup programs have their limitations however. Even if you have backed up your entire hard disk to floppy the night before, everything you've done today will be lost if the worst comes to the worst. In fact, the only way to really protect current data is to save everything twice, once onto the hard drive and again onto a second drive or floppy. That way, a disaster such as a disk crash won't mean you have to start again.

To be really ahead of the gremlins that will one day find their way into your system, a combination of all these techniques is required. With a program like Diamond Back, you can make a full backup of all your important data and

then make regular incremental backups, including only the files that have changed or have been added to specific directories.

Diamond Back 3 comes on a single disk with a well produced 58-page spiral bound manual inside a glossy box. Installation is via a custom utility that embeds your name and address in the program. The installation program then creates a directory on whichever drive you choose for installation and copies all the files from the master disk. It then checks for attached devices, including hard drives, tape streamers and floppies.

It's at this point that you start to notice the stunning interface. Diamond Back is now completely mouse controlled, unlike its predecessor which had a much less intuitive interface. Most options are selected using pop-up lists and each has its own icon, making the program highly intuitive and easy to use. The manual has a quick start section and a detailed part which deals with the program's feature in more depth.

Diamond Back offers both file and image backup and full or partial restoration of files. File backup is the normal

Number crunching

Files can be compressed or encrypted, depending on your needs, and disks can be formatted by the program or simply erased and written over without changing the number of sectors and tracks. This is a useful feature as the type of format does not matter — standard ST disks can be mixed with extended format disks without any problem. If a problem occurs on a disk, the program recovers and lets you insert a new disk without ruining the backup set. The program will format disks to the standard 720k or 1.44Mb as well as 800k and 1.62Mb but can obviously write to any pre-formatted disk. You can also back up to other hard disk partitions, Flopticals, Syquest drives and even SCSI tape streamers and DAT drives.

Compression ratios, which use a variation on the LZW algorithm, are fairly good — backing up a 47Mb partition of mixed data, including programs, fonts, image files and a good sprinkling of already archived files (which are spotted by the program and not compressed further), the data was squashed down to 31Mb and squeezed onto 23 high density floppies. Without compression, the backup took 36 floppies, making it the slower option as more disks had to be written. If you're backing up to tape or other partitions, compressed backups take roughly twice as long.

Speed is important too, of course, as a slow backup program just won't get used, human nature being what it is. Diamond Back is very fast and writes disks at very respectable speeds.

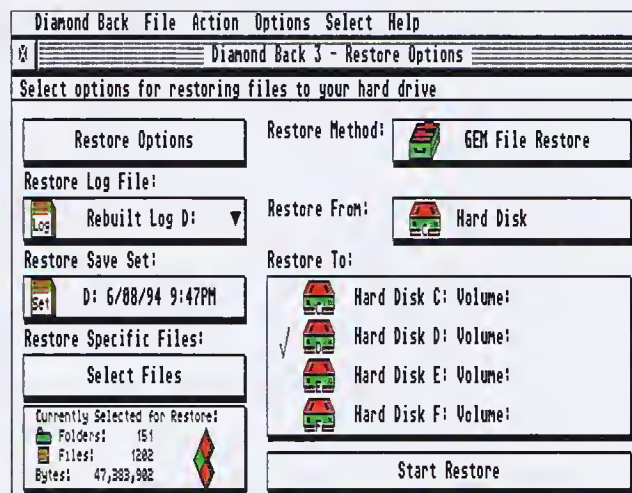
You can't be too sure

To help you, backup sets can be saved and called up from pop-up lists whenever necessary, including the specified paths and other parameters. Log files tell you what is in a particular backup, whether it is compressed and how many disks it is spread over. This goes some way towards correcting a deficiency in version 2 that meant you couldn't readily tell whether a backup was compressed or not. Both logs and backup sets can have identifiable names, making it possible to set up quite complex backup strategies with the minimum of fuss.

Search masks and wild cards can be used when backing up and there are plenty of options to choose from, such as inclusion and exclusion masks.

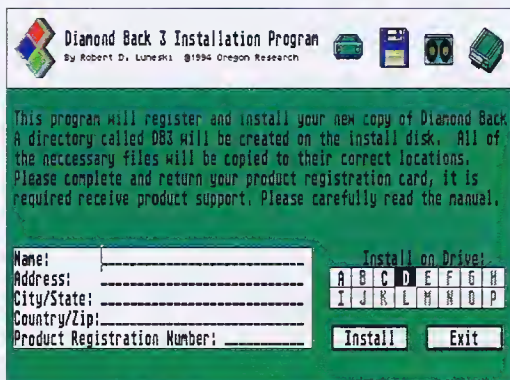
This flexibility means you can build up detailed backup configurations to save you time and effort, backing up only the data and configuration files, for example, and leaving program files which can always be re-installed from the master disks if necessary.

Diamond Back also offers real time validation which ensures that the file is put back exactly as it was by checking for errors, though this does slow down the backup process.



The restore options are well presented — this is ST medium res

prepared!



The installation program

approach, saving data file by file, but image backup can also be useful. Image backup means saving a hard disk partition to floppy disk sector by sector instead of file by file. Image backup is intelligently handled and only the sectors that are used will be backed up. There is even support for Spectre GCR partitions.

Full restore simply restores all the data back onto the hard disk while partial restore lets you restore specified files. Full or incremental backups are also supported so you can do a full hard disk backup once a month, for example, and a daily incremental backup by archive bit or date.

A progress window is shown while backup is being carried out so you can see how far you've got and even pause or quit halfway through. The pause option lets you stop the program temporarily to access another such as a desk accessory. This is handy for receiving faxes, bringing up an address database or even doing some urgent filing operations if you use a custom file selector.

Disk usage is estimated and updated by the program so you can see at any stage how many more floppy disks you need to scabble around for. The number is updated in real time but no account is taken of likely compression ratios or the time already taken and the remaining time to completion which I found somewhat disappointing.

Whenever a new disk is requested, a sensible dialogue appears that offers you the option to inspect the disk first — just in case you have doubts about what's on it — or simply carry on and overwrite the contents. You can also choose to format at this stage if you suddenly find you need more disks and have to open a new box of unformatted blanks.

COMPRESSION

On the main menu screen, all options are selectable from icons or pop-up menus. A small button bar in the top left corner offers compression on or off, the option to split files between disks, overwrite or format all floppies, skip, prompt or overwrite files with the same name and validation on or off. Splitting files between disks can save a lot of space, particularly if you have some big files that don't fit on one disk.

Once you have backed up your data, the more nervous users can immediately check that everything has gone to plan by verifying the complete backup. This is often useful if you have very important data or you suspect that one disk in a set has been damaged.

Diamond Back also runs in the background under multitasking systems such as MultiTOS, which means that you can back up your hard drive while you're

writing or doing your accounts, as long as you're prepared to be prompted for a new disk every minute or two.

You can specify how much system time the program gets and the maximum read size for any file, which helps make the multitasking smoother. In theory, the program will also allow multitasking with GEM event-driven desk accessories such as Harlekin but this isn't recommended as the system slows down enormously and becomes a lot more unstable in my opinion. Indeed, trying to use Imagecopy at the same time as performing a backup resulted in a good old-fashioned system crash.

Diamond Back 3 is an excellent program with a lively interface, especially on colour systems such as the Falcon, and a marvellous array of options. Whether existing version 2 users need to upgrade will depend on how often they use it. The major changes are in the look and feel rather than the functionality but the added support for SCSI tape drives, better compression and enhanced reporting and configurability means it won't be money wasted.

BOTTOM LINE

FEATURES

A superbly designed program with scores of essential backup features

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Completely mouse driven with a thorough, easy to read manual

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Good value given the features but it could do with being lower

Excellent
Good
Average
Bad
Appalling

Product: Diamond Back 3
Supplier: HiSoft, The Old School,
Greenfield, Bedford
MK45 5DE
Telephone: 0525 718181
Price: £49.95
Configuration: All Atari's except in low
resolution

ATARI *exclus* ST USER 15 £££-

Atari Joystick

This is an unbeatable offer for all gamers - an Atari joystick for just £2.99.

It's ideal for anyone, but especially for those who would like a second stick ready as a spare for visiting friends. With easy access Fire buttons on both sides of its small case, this model is suitable for left and right-handed players and

fits comfortably into the hand.

**ONLY
£2.99**

DataView monitor

This SVGA high resolution mono monitor has been specially modified to work on all STs and is ideal for such applications as DTP, music and word-processing.

It features a 14-inch FST screen for superb picture quality and has front mounted controls for power, brightness and contrast.

Also featured is a swivel base and rear controls for picture size and positioning,

Also included is a cable adapter which has a small built-in speaker and an audio connector which allows you to connect it to a hi-fi system.



**ONLY
£104.99**

Trackball

Ever fancied a mouse alternative, but been put off by poor trackball designs? Well, we've found the answer - the Legend Ball.

This 320 dots per inch trackball has been ergonomically built, putting all controls within easy reach of your fingers and featuring a smooth platform on which to rest your palm.

While the mouse pointer is controlled by your thumb, item selection can be made easily without removing your hand from the device.



**ONLY
£24.99**

Mouse

This high resolution replacement for the chunky and sluggish Atari mouse is perfect for use alongside all your leisure and business applications.

Switchable between ST and Amiga use, the stylish Eclipse model features micro-switch technology to give smooth operation, easy use and durability.



**ONLY
£9.99**

Memory

With more and more memory-hungry programs being launched for Atari computers, there's never been a better time to upgrade yours.

Extra memory will enable you to play the most exciting simulation games, use powerful graphics drawing programs or even design colourful pages with the latest publishing software.

We've put together options for all types of Atari enthusiast - and with the STFM boards you'll be able to extend the memory up to 4Mb of memory at a later date.

They're all at really competitive prices, with a service available for buyers who don't feel confident to fit the upgrade themselves.

**FROM
£8.99**

512k STE.....	£8.99
STE to 2Mb	£49.99
STE to 4Mb	£99.99
512k STFM	£29.99
STFM 2Mb.....	£74.99
STFM 4Mb	£129.99

GREAT WAYS TO UPGRADE

External drive

An external floppy drive which plugs straight into the back of the ST can benefit every type of user - from games player to publisher.

Disk copying is faster and easier once a drive has been fitted, and there's no need for inconvenient disk swapping when using powerful software.

The advantages of owning a second drive - and what better way is there of expanding your system than choosing this bargain-priced but high quality device?

**ONLY
£57.99**

ively presents

saving ways to stretch your ST's limits...

Midi Studio Master

This Midi sequencer – which previously sold for £99 – enables you to turn your ST into a fully-fledged music controller.



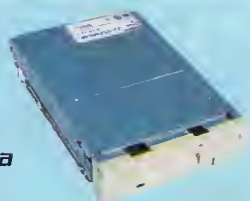
With this software and compatible synthesiser keyboard you can write, store and playback stunning compositions just like the professionals.

Its features include 100 track storage, 240 PPQ resolution, Midi standard file compatible, real-time mix-down via mouse, real-time scrolling arrange window and pipeline module system.

**ONLY
£9.99**

Internal Drive

Imagine the advantages of upgrading a single-sided floppy disk drive to a double-sided version.



If you're still using the old style single-sided drive, then you'll have already found that most of the latest software doesn't work with your ST. Replace it with this internal model and you'll be able to run all programs, including your existing collection, and have double the storage capacity on every disk.

The drive is easy to fit but because official Atari drives are no longer available, some small alterations will be needed to the ST's case.

**ONLY
£39.99**

TOS upgrade

Give your ST the extra features and improvements of the latest operating system but keep compatibility with all your existing programs.

With TOS 2.06 you'll be give your computer a brilliant new look, and have the ability to put frequently used folders and files onto the desktop for easy access.

Extra icons are available for folders and hard drives, keyboard shortcuts make control easier, the desktop's colour can be changed and GEM programs set to run automatically.

Its support for high density floppy drives is just another reason why this bargain upgrade is right for you. A fitting service is available.



**ONLY
£59.99**

Fitting and return delivery

We realise that many ST owners would love the power offered by extra memory or the latest operating system but are put off by the prospect of fiddling about inside the computer.

This is why we've teamed up with a leading Atari dealer who for a small extra charge will

be able to fit memory and TOS upgrades, and even arrange for your machine to be sent back.

If you choose this service please don't send you computer just yet – once we've received your order an Upgrade Centre representative will arrange a convenient appointment time.

UPGRADES ORDER FORM

Fill in this form and send it to Upgrade Centre, Europa House, Adlington Park, Macclesfield SK10 4NP

**ATARI
ST USER**

- | | |
|--|--|
| <input type="checkbox"/> 512k STE upgrade.....£8.99 | <input type="checkbox"/> Mouse .....£9.99 |
| <input type="checkbox"/> STE memory to 2Mb .....£49.99 | <input type="checkbox"/> Trackball .....£24.99 |
| <input type="checkbox"/> STE memory to 4Mb .....£99.99 | <input type="checkbox"/> Midi Studio Master.....£9.99 |
| <input type="checkbox"/> 512k STFM upgrade.....£29.99 | <input type="checkbox"/> Joystick.....£2.99 |
| <input type="checkbox"/> STFM 2Mb .....£74.99 | <input type="checkbox"/> TOS 2.06 (STE) .....£59.99 |
| <input type="checkbox"/> STFM 4Mb .....£129.99 | <input type="checkbox"/> TOS 2.06 (STFM) .....£59.99 |
| <input type="checkbox"/> Internal floppy.....£39.99 | <input type="checkbox"/> DataView Hi-res mono monitor..£104.99 |
| <input type="checkbox"/> External floppy.....£57.99 | <input type="checkbox"/> Fitting and return delivery .....£19.99 |

Please add £1 per item for postage and packing within mainland UK – for overseas telephone the Upgrade Centre on +44 772 203166. All products only available while stocks last

I wish to pay by...

☐ Cheque/postal order payable to Europress Enterprise Ltd

☐ Credit Card No Expiry date

Name

Address

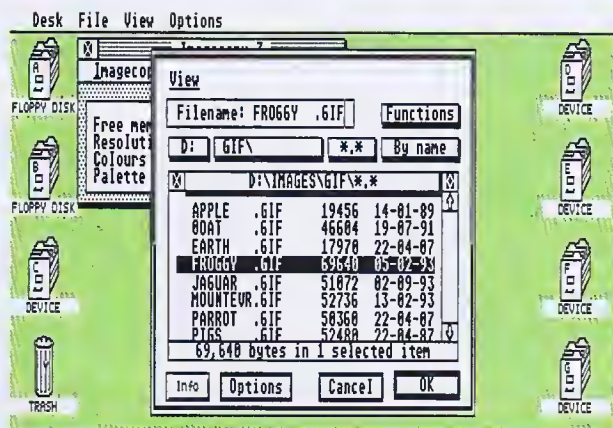
Postcode Daytime phone

Please do not send your ST to the above address. The Upgrade Centre will contact customers requesting the fitting service with full address and booking details.

☐ Tick this box if you do not wish to receive promotional material from other companies



Replacement file selectors like Selectric (shareware) can be loaded as a matter of course, without appreciably affecting boot times



Andrew Wright presents a detailed look at the benefits of that most sought after upgrade – the hard disk drive

Trying hard

The upgrade to a hard disk is one of the most difficult for the average ST owner to make, largely because the benefits are so well hidden.

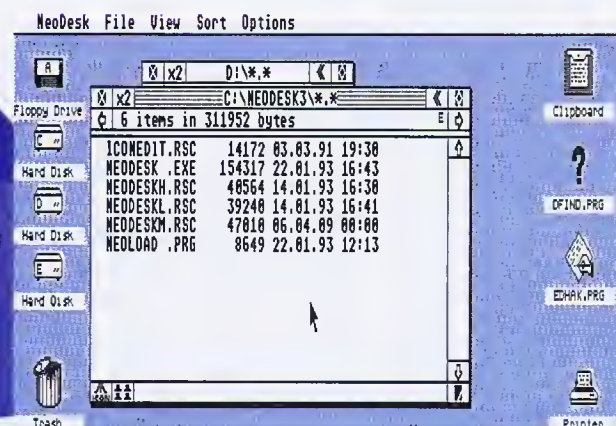
You can see the advantages of the usual add-ons such as a decent printer, a monochrome or colour monitor, a graphics card or a hand scanner in magazine reviews and decide on that basis what you want to spend your money on. But you can't tell what a hard disk will do without either trying one out or watching one in action. Even then, it takes many weeks of experimentation before you start to see what a powerful beast you've unleashed, as most of the real benefits aren't immediately obvious.

The upgrade you decide to spend your hard-won cash on will also depend on your needs – a desktop publisher's requirements won't match those of a programmer, music lover or a computer artist. However, a hard disk brings universal speed and performance improvements to almost every category of user, with the possible exception of games players. Even then, many of the bigger, newer games will run quite happily from a hard drive.

What's more, with the recent drop in price, hard disks are looking better value than ever before.

Eight years ago, when the ST market was in its infancy, you might have had to fork out upwards of £700 for a 10 or 20Mb hard disk. Just five years ago Ladbroke's, one of the longest-standing ST hard disk suppliers, was offering a 20Mb drive for £499.

Nowadays you won't be able to buy



Faster program loading also makes replacement desktops like Compo's NeoDesk a realistic choice

10, 20 or even 30Mb drives because manufacturers can make 100 Mb and larger drives just as efficiently. System Solutions have recently launched a 40Mb model for just under £200 but as it is getting harder and harder to source any drive under 80Mb, you'd be advised to get in quick.

Bigger drives are better value, of course, so unless you're on a tight budget, a 100Mb drive or bigger is recommended. Not only are bigger drives even faster, they can store more data at a lower cost per megabyte.

What will a hard disk do for me? The obvious answer is the turn of speed it will give you. It's something that's very hard to quantify but on a bog standard ST you can expect programs to load somewhere between 5 and 10 times faster and filing operations such as copying and deleting between 3 and 15 times faster with a fast, medium sized (127Mb) hard disk.

SPEED

However, that in itself isn't the whole story and the figures depend on which TOS you have, which driver software you use, and the type of hard disk and host adapter you are using.

The speed increase brings its own benefits. Because booting is so fast – with a minimal setup you can be up and running in seconds – you can comfortably add more and more AUTO folder programs and desk accessories to the boot partition without having to make a cup of tea while they load.

With all the system enhancements available these days, ranging from Let 'em Fly and Winx to NVDI and replacement file selectors, this means your system becomes infinitely more customisable without extending the boot time.

Programs load in a matter of seconds – even the big, clumsy ones like Pagestream and Calligrapher – making life an awful lot easier. If you suddenly need to exit Timeworks and edit an image, it no longer takes the rest of the afternoon to get back to where you

Jargon busters

SCSI IDs – SCSI devices have unique addresses or IDs, usually from 0 to 7 on the ST. Most hard disks use ID 0 as lower numbers are accessed quicker. The Atari laser printer uses ID 5 or 7 and the clock in an ICD host adapter such as the AdSCSI uses ID 6. Any further SCSI devices – be they CD-ROMs, optical drives or another hard disk – need a unique address, which is usually achieved by altering a selector switch.

Fragmentation – When files are repeatedly copied, moved and deleted on a disk or partition, many of them will become fragmented, that is spread across non-contiguous sectors on the disk. Fragmentation slows read and write operations down considerably and can result in lost files if not "treated".

Optimisation – this is the process of re-ordering files on a disk or partition so that they are all placed in consecutive sectors, usually ordered by directory, so that the

operating system doesn't lose track of them and accesses them faster.

MFM and RLL – You'll also come across the terms MFM and RLL. The former is the old method of formatting the hard disk surfaces but it has been superseded by the more efficient RLL method. Virtually all new drives use RLL technology. If you buy an old second-hand drive which uses MFM formatting, it simply means it will be a little slower and a little less efficient than it could be but it won't affect you in day-to-day use.

LUN – Another parameter called LUN (for Logical Unit Number) is used to differentiate between different ST506/412 drives hooked up to a single controller. As most controllers can handle two drives, one is set as LUN 0 and the other is set as LUN 1. SCSI drives have their own individual controllers and are always LUN 0. Again, it's not something you need worry about.

were. With small utilities loading near enough instantaneously, you can start installing applications so that they load whenever a particular data file is double clicked. For example, on my system, clicking on a file with a *.TXT extension loads EdHak, the text editor rather than the Show, Print, Cancel dialogue.

This underused TOS feature makes much more sense with a hard disk as the installed application is always available. On a floppy-based system the boot disk or other disk with the application on would always have to be in the drive.

Faster program loading also makes replacement desktops a realistic choice, especially as they usually have plenty of options for hard disk owners such as program icons on the desktop and search features.

Other activities that many floppy drive owners discard due to the time they take up, become much more attractive. Loading and saving data files is speeded

up significantly too, so more frequent saves are easy to handle. Some programs like That's Write will even save your data automatically every two minutes or so – without you ever really noticing.

Printing is often faster from programs like Timeworks that spool the output to disk and you suddenly find yourself using the GEM clipboard more as it no longer takes any time at all to save to disk.

Space, naturally enough, is the other big benefit of a hard disk. Even a small 40Mb drive will hold the equivalent of more than 50 floppy disks' worth of data, allowing you to install most of your existing software to where it is easily accessible.

If you have Tos 2.0x or a replacement like NeoDesk you can install all your frequently used programs on the desktop as icons. As soon as your ST boots and the desktop appears, you can click on and load your favourite program ➤

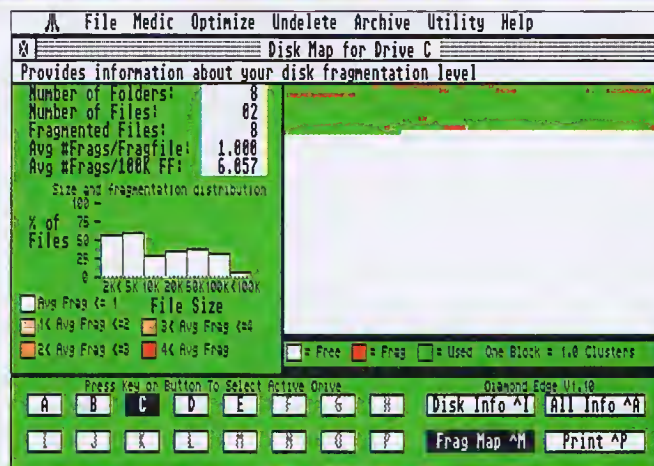
Taking care of your drive

Diamond Edge, currently at version 1.10, is a comprehensive disk care utility that lets you examine your disk drives, optimise hard disk partitions and recover lost data.

Available from HiSoft for £29.95, Edge is a GEM-based program with scores of options. It will examine floppy or hard disk partitions and provide a detailed report on the number of sectors, clusters and tracks plus information on FATs and root directories and a graphic representation of the amount of space used. Edge will then give you a fragmentation map, letting you see just how badly your files are distributed around the disk.

Two optimisation methods are available. Full optimisation re-orders all files on your hard disk by directory while compress simply moves all the files together to one end of the partition. The end result of a full optimisation should be a much faster hard disk as the heads don't have to work so hard to get at your data.

Edge can do all sorts of other things too, like altering, zeroing and wiping partitions, mapping bad sectors, and archiving partition data to allow recovery from hard disk crashes. The manual is very comprehensive and contains a gold mine of useful information on hard and floppy drives.



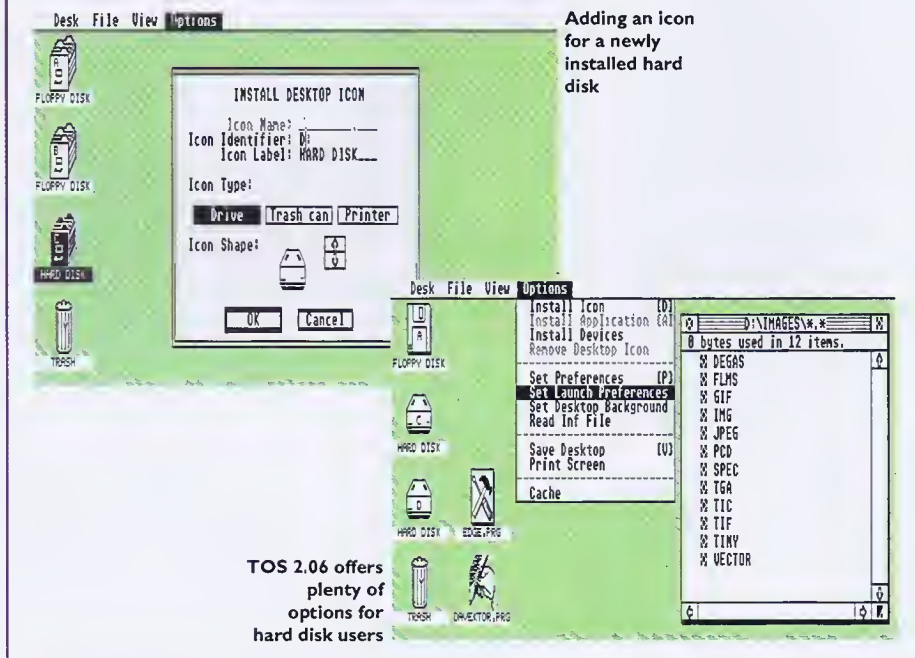
Diamond Edge – worth its weight in carats when it comes to restoring lost data and looking after your drive.

Working on the desktop

Life with a hard disk is a whole lot easier. Instead of just one or two icons on the desktop, you get as many as you have partitions, up to a maximum of 16. More can be made available but the desktop starts looking pretty crowded, so sticking to around three or four hard drive partitions is often more convenient.

Once you've installed your hard disk, you can add new icons to your desktop quite simply (though Install Devices does it automatically on TOS 2.0x and above). Double clicking on the relevant icon then opens another drive window into which you can copy your programs and data.

TOS 2.0x offers a range of different drive icons so you can differentiate floppies and hard disk partitions at a glance and it also lets you place program icons on the desktop for easy access. TOS 1.4 or above is recommended for use with a hard disk as TOS 1.2 and earlier versions are extremely slow at disk operations.



Adding an icon for a newly installed hard disk

TOS 2.06 offers plenty of options for hard disk users

without hunting through disk boxes. You can banish thoughts like "I know it's the dark blue one with the torn red label but which disk box did I put it in?" for ever!

Of course, you can install programs on the desktop on a floppy-based system but you would always have to ensure that the right disk was in the drive when you double clicked on it. Better still, program launchers like Hotwire can provide access to every single program on the drive from a single easy-to-use menu.

POSSIBILITIES

Hard disk space is vital for many applications. Today's most exciting programs like DA's Vector, DA's Picture, AtariWorks and SpeedoGDOS all require a hard disk and the list is growing all the time. Provided you have the RAM, a hard disk opens up all kinds of possibilities in DTP where you can have many more fonts and clip art ready to hand in programs like Timeworks, Pagestream and Calamus.

For music lovers, a hard disk means you can store and edit large samples and sound tracks while for those into image processing or video digitising, the same applies. It doesn't take a large colour image to outgrow a floppy and once you've created it, you're stuck if you can't save it! Databases, archived files, raytracing programs and PhotoCD all require space too and the more the merrier.

Hard disks are rigid platters made of specially coated metal that rotate over

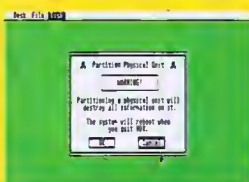
Hard disk drivers

AHDI Version 6.x of the driver, known simply as AHDI, is the latest Falcon-compatible version but version 5.x is recommended for ST owners. The accompanying utilities include a very basic formatting and partitioning utility which also allows zeroing of partitions and another which installs the driver on the hard disk itself.

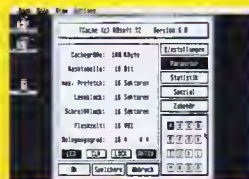
AHDI is relatively slow and requires some third party caching software (or Atari's own CACHEXXX.PRG) to get the most from it. However it offers maximum compatibility with every application you're likely to come across.

HD Driver is new from Germany. On sale with System Solutions it costs £20 or £10 if bought with a hard drive and includes a readable manual aimed at first time hard drive users. It is very simple to set up but there are dozens of useful configuration options including sector size options for removable drives, write protected partitions, booting from other than drive C, and the ability to allocate extra FAT and data buffers to speed up disk access.

HD Driver still has a few bugs to be ironed out and I had problems with the cache and one of the configuration accessories. However it is by far the fastest hard disk driver, fully compatible with the AHDI standard, and is well worth investigating. The manual and high level of support from System Solutions makes it a must for the beginner too.



Atari's Hard Disk Interface software is basic but free



Atari's Hard Disk Interface software is basic but free

The **ICD Pro** utilities work with any host adapters, including The Link and Translator, and with any SCSI hard disk. The Pro package offers a full version of Cleanup, a defragmenting utility, and a SCSI direct command utility on top of the usual drivers, formatters and partitioning software. The driver is a useful one too, with configurable read and write caching, write verify and several other options.

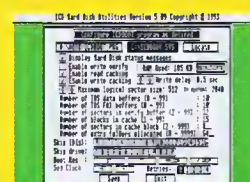
The ICD drivers have a wide following and there's no doubt they speed up your system and provide a good array of tools for delving into your system more deeply. With Cleanup you can also defragment your drive on a regular basis to safeguard data.

Boot managers are special programs designed to get you up and running with your chosen combination of desk accessories and AUTO folder programs as quickly as possible.

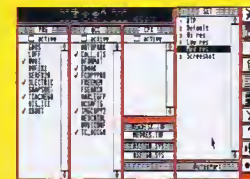
They are the first programs to load from your AUTO folder and they then control the remainder plus any desk accessories. Normally, if you need to reboot without an accessory installed, either for compatibility or to free up memory, you need to disable it by renaming the .ACC extender to something like .ACX so that it is ignored by the operating system when it next starts up.

Boot managers take all the fuss out of it, by doing it automatically with simple key presses or mouse clicks.

If there's one type of program that can be said to use a hard disk to



Configuring the hard disk driver with ICD's utilities



XBoot3 lets you boot up quickly and efficiently

fixed heads. The delicate heads ride on a small cushion of air and never actually contact the platter itself. If they do, it usually results in loss of data or permanent damage to the heads themselves.

The ST is linked to the hard disk through the DMA port and communicates through a protocol called Atari Computer Systems Interface. Atari's own drives, the Atari Megafiles which are now discontinued, plug straight into the DMA port. The ACSII commands sent by the ST to access the data are translated by a device called a host adapter into signals the drive's ST506/412 controller can understand.

ST506/412 is a set of protocols developed by Seagate which is all but obsolete and the market is now dominated by IDE drives (as used on the PC and Falcon) and SCSI drives (as used by Apple Macs, STs and others).

Atari's ACSII was based on the Small Computer Systems Interface (SCSI) that later became an industry standard and is used on many other platforms such as Apple Macs and some PCs. However, as a result of some unfortunate but significant differences, an ACSII to SCSI converter (known as a host adapter) is required before the Atari can communicate with a standard SCSI drive. This extra hardware tends to push up the price.

If you were to wander out and buy a bare SCSI drive, you'd still need to source a host adapter. The best ones are the external adapters like ICD's The Link and System Solutions' Translator.

its full advantage, it has to be the **program launcher**. Your programs will invariably end up spread all over your hard disk and accessing the more frequently used utilities can be a pain, especially if you have to navigate through a lot of folders.

A program launcher simply presents you with one or more menu screens from which you select the program you want to use.

You have to spend some time setting it up, but the result is that you can usually load any program in your entire collection (as long as it's on your hard disk) within about 15 seconds of switching on your machine.

Backup utilities. Backing up a hard disk is essential, particularly if you value your data. Although you may well have kept your master disks, CoverDisks and PD disks, your data files such as word processor documents, DTP files and images will all need to be carefully looked after.

Although hard disks are relatively reliable bits of equipment in physical terms, they can often become corrupted in everyday use.

This inherent unreliability – due to the way files are written, deleted and then written over – means that your first move when you get a hard disk should be to investigate the back-up software.

Once you've done a full backup, keeping up to date is easy if you choose a program with support for incremental backups.

This means you only back up the files that have changed since the last time you carried out the procedure. If you really want the best in backup utilities, see this month's review of Diamond Back 3.



Turtle is a freeware utility for backing up hard drives



Adding a hard disk

Adding a hard disk is quick and easy, especially with System Solutions' HD Driver software which provides an easy to follow manual aimed at first time hard disk users. Most drives come ready formatted so you can plug in and play but let's assume you want to do it yourself.

With the drive plugged into the ST's DMA port (helpfully marked "hard disk"), you can switch it on and wait for it to get up to operating speed. Next, you insert the floppy disk containing the HD Driver software in drive A and switch on the ST. The driver program itself, HDDRIVER.PRG, is in the disk's AUTO folder so you'll see a brief message telling you that the drive is installed.

Next you run **HARDPART.APP**, to partition the drive (Figure 1). The first screen shows you which devices you can partition – if you only have one drive attached, only one will be available (Figure 2). The second screen allows you to decide how many and what size partitions you want.

One big partition isn't a good idea from a data management point of view and access is also slower. If you need a big partition, say for sampling or large files, select at least a small boot partition and use the rest as the data partition (Figure 3).

The next step is a reboot so that TOS gets the information about the new partitions, followed by the **HARDBOOT.APP** program which installs the driver onto the hard disk (Figure 4). You can also run **HDDRCONF.APP** which lets you configure the driver fully for your particular setup (Figure 5).

Next time you reboot, you'll notice how much quicker the procedure is – after a quick peek at your floppy, the hard disk will take over. All that remains is to install all your accessories and AUTO folder programs on the hard disk, followed by the rest of your software.



Figure 1



Figure 2

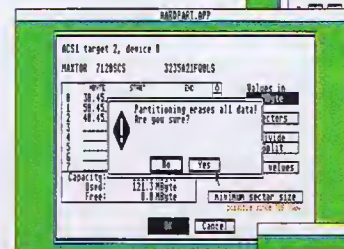


Figure 3

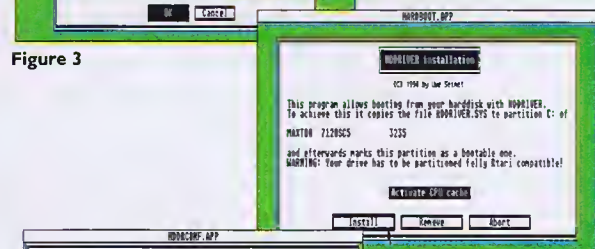


Figure 4

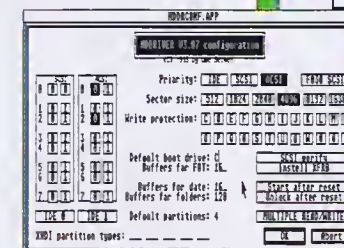
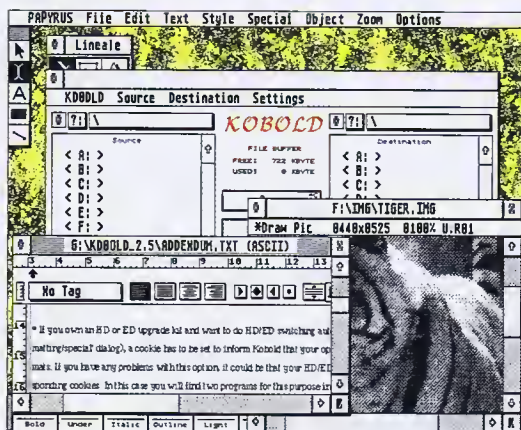
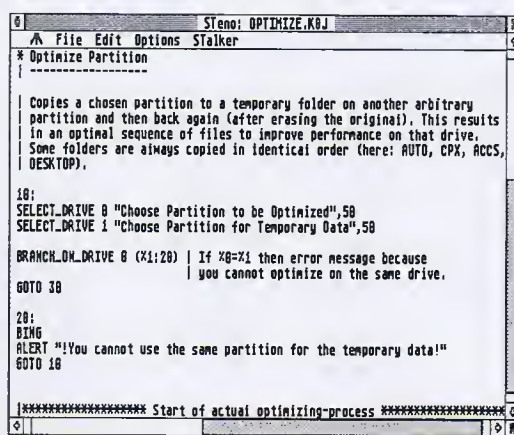


Figure 5



Kobold really comes into its own under multi-tasking operating systems such as MultiTOS. No need to waste a desk accessory slot, and blank disk formatting or incremental backups can be performed as background tasks while you are occupied with your business correspondence



An example of a job file, as supplied with Kobold. The Basic-like programming language takes a bit of learning but for the lazy there is always the Job Recording function — trouble is you have to actually do the job in the first place to have it recorded

Speed reading

Günter Minnerup finds that there's more to Kobold than meets the eye

Time and speed are certainly very relative concepts. My first ST was running at 8MHz, had only 520k memory and a single-sided floppy drive, yet I thought it was the bee's knees for desk top publishing and certainly a speed wizard when compared to its predecessor on my desk, a humble CP/M machine then sold by the present chairman of a North London football club.

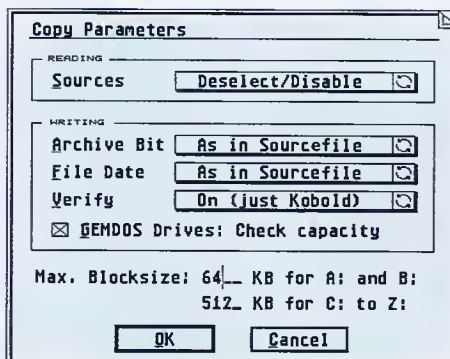
These days, I twiddle my thumbs impatiently while my 32MHz TT with its 6Mb FastRAM and 19ms access hard disk redraws a complex vector graphics screen. The more speed you have, the more you want, and computer manufacturers must feel like the tortoise in his race with the hare when trying to meet the ever growing demands of the market for extra power and zip.

Not all of us, however, can afford to "trade in" our existing machines for the latest and fastest model every 12 months or so. Trying to make the most of what we have got, we turn to hardware accelerators, operating system upgrades and a whole host of little utilities to squeeze every ounce of performance out of the current setup.

The public domain and shareware scene is a particularly rich picking ground for such system tweaks; the only trouble is that many of the ingenious hacks available there for little or nothing have a tendency to be incompatible with each other, or with some of your favourite applications.

Take, for example, early versions of Quick ST, an impressive-looking software screen accelerator. Unfortunately it tended to mess up the display on some applications and was generally extremely choosy about the company it would get on with, so it was eventually replaced on most people's systems by the commercial and much more compatible - as well as more effective - NVDI.

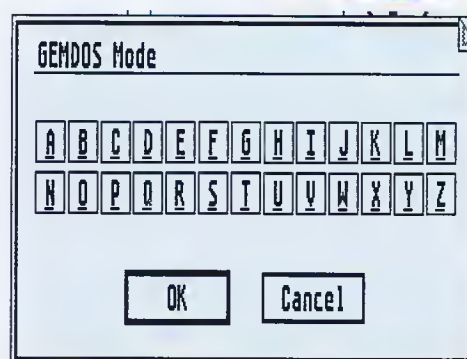
In the end, commercial solutions tend to be safer in most cases, if only because flaki-



The Copy Parameters dialog allows you to fine tune operations. The maximum block size can be set differently for floppy and hard disks, for example, to optimise speeds for each medium

ness is not very conducive to the long term profitability of a product.

Graphic output is only one area where every ST, Falcon and TT can benefit from specially optimised routines such as those



GEMDOS mode is specifically for CD-ROM drives and other media which can only be accessed by special software drivers

offered by NVDI. Another one is file handling. Early STs were a pain to use with hard disks because TOS versions before 1.04 were written with floppies in mind, but even TOS 1.04 and higher are far from

Faster than the eye

The basic principle behind Kobold is quite simple: rather than handle each file separately, it will optimise transfer speeds by first reading all the files to be copied into its own internal file buffer and then writing the lot with a single call to the operating system.

The more files to be copied, the greater the speed gain of course, and the less fragmented the target disk or partition, the better. There are other tricks employed by Kobold so that file operations are always faster than if carried out from the Desktop, but the most impressive timings are obtained when large chunks of one hard disk partition are copied or moved to another relatively "clean" one.

Using Kobold to copy just over eight megabytes (consisting of 11 folders and 184 files) from D to E, for example, took just 26 seconds on my TT as against 1 minute 16 seconds with GEMDOS. Intelligent directory handling will make file copies within a single partition or floppy disk all but instantaneous when the data doesn't actually have to be shifted physically — blink and you'll literally miss it!

Kobold really transforms your daily computing life

hyper-efficient when it comes to the routine disk management chores.

The built-in GEMDOS routines are reliable enough, but will not drive modern hardware to its performance limits. For some time now, a variety of PD fast formatters and disk copying utilities have offered partial answers to the problem, but once again incompatibility problems and uncertainties over long-term support have ensured that none of them have really established themselves.

Here too a commercial solution promises to do for file handling what NVDI did for screen output — and like NVDI, it is a German import distributed in this country by System Solutions.

Installed as a Desktop accessory, or run as an application under multitasking, Kobold is available at any time and offers all the standard file management functions — format, copy, move, delete and so on, even as background tasks under MultiTOS or Mag!X.

COST EFFECTIVE

So far, so good, I hear you say, but fifty quid for a disk copying utility still seems a bit steep, however fast it is. After all, it is only a few seconds out of your life each day, and you would have to do an awful lot of disk copying to make Kobold cost effective through file copying alone.

The most time-consuming and tedious aspect of many routine housekeeping tasks is not the speed of the actual copying or deleting operations themselves, but the clicking through several directory levels, opening and closing of windows, directory updating and selecting and deselecting. With today's huge hard drives, multiple partitions and deeply-nested folder structures, even finding a particular file can be difficult enough.

Take the relatively simple example of releasing extra storage space by deleting redundant back-up files and eliminating duplicates: most of us only bother to do this when we are in truly dire straits, desperately needing a few kilobytes to save that file we have just created. With Kobold though, it is easy to automate this procedure so that it can be performed regularly once a day or every week by calling up — with a function key, if you like — an appropriate .KBJ (KoboldJob) file.

These KBJ files can be created with any ASCII text editor using the built-in command language, or alternatively by invoking the macro record mode: once the task in question has been performed "manually", it is saved to disk as a KBJ file. Very neat!

The manual, it should be added, is of great help in making the most of Kobold — not the poorly translated photocopied sheets you get with so many German imports, but a properly printed and bound

70 pages in perfect English.

To be quite frank, I probably would not have bothered with Kobold if it had not been given to me for reviewing. Fifty quid for a file copying utility seemed a bit excessive!

Speed, however, is addictive, and after only a few days of intensive use I decided that I couldn't possibly go back to the built-in Desktop routines. The Job files took a bit longer to get me hooked, since the initial tendency is to do everything in the same old ways learned under GEMDOS — old habits die hard. But once you discover the "Record Job" function and start defining a few macros, Kobold really transforms your daily computing life.

On the other hand however, some of the more complex tasks which Kobold can be programmed to perform automatically can be accomplished even more effectively using dedicated utilities.

Take hard disk backup, for example: Kobold can be instructed to carry out "incremental" backups at the end of each working session, copying only new or updated files to floppy, but far more sophisticated back-up features are offered by a dedicated program such as Diamond Back, at speeds that come close to Kobold's.

Copying 8Mb from one partition to another, which took Kobold 26 seconds as against 76 seconds under GEMDOS, will take a pretty nifty 44 seconds using Diamond Back, and the latter also offers the option of compressed, space-saving archives.

For a small, floppy-only computer used mainly for word processing and games, Kobold would almost certainly be overkill. But for owners of large hard drives used in data-intensive operations such as graphics editing, DTP and music, it will soon pay for itself in saved time, nerves and energy.

NVDI owners already know the feeling: once you are used to the extra performance, doing without it is like a return to the stone age. Finally, for those making extensive use of multitasking, and especially with alternative desktops such as EASE or GEMINI which can be interfaced directly with Kobold, this file copying speed demon capable of sitting (and working) in the background is an absolute "must have".

BOTTOM LINE

FEATURES

Very powerful and versatile, especially with the job macros

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Quickly learnt and well documented

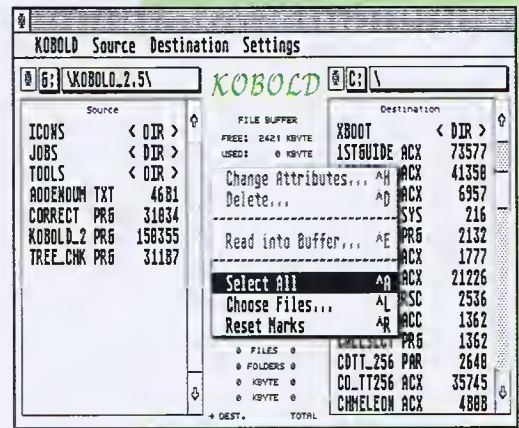
Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

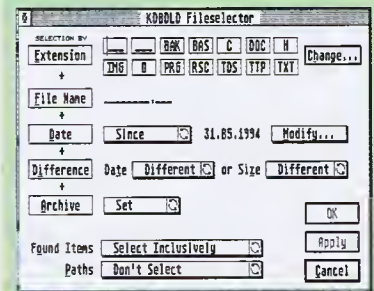
Not cheap but classy and worthwhile for larger hard drives

Excellent
Good
Average
Bad
Appalling

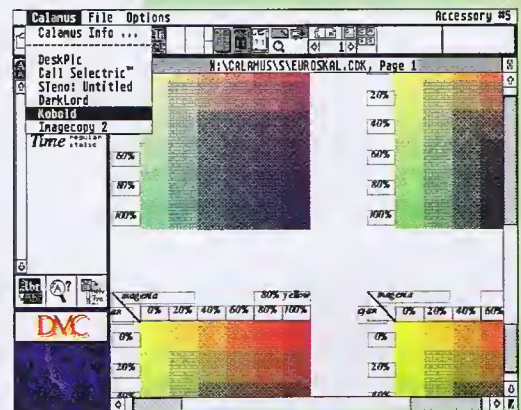
Product: Kobold Version 2.5
Supplier: System Solutions,
Windsor Business Centre,
Vansittart Road,
Windsor SL4 1SE
Telephone: 0753 832212
Price: £59.95
Configuration: Any STE/Falcon/TT with a
minimum of ST Medium
screen resolution



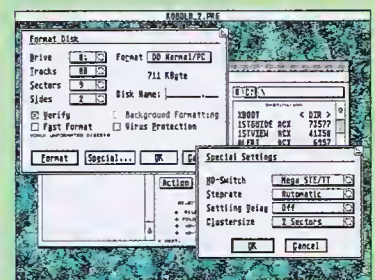
Kobold's user interface is reminiscent of ST-ZIP with a source and a destination directory side by side so you always know what is going where. Mac-like pull-down menus and pop-ups make working with Kobold a pleasurable ergonomic experience



Need to copy all C source files created since yesterday to an archive partition, stamping them with today's date? No problem with Kobold's file selector dialog



Installed as an accessory, Kobold is available from any GEM application to outperform the equivalent GEMDOS functions offered by most programs



The "dog ears" on the top right corner of each dialog indicate that these are flying dialogs that can be moved about on the screen — it is also possible to have dialogs in windows

HUGE

selection from
the finest range
of software and
hardware for
TOS computers

- Atari STFM £CAll
Configured to your needs
- Atari MegaSTe and TT £CAll
Occasionally available
- BJ10e £4.99
Driver for Write ON
- Blitter Chip £CAll
For most STfMs and Mega ST
- C-Font £9.99
Calamus font converter for
WO and TW
- COMPO CD ROM £CAll
Demos of Commercial
German software
- COMPO CD-ROM ROM £CAll
Coming soon to connect a
Mitsumi CD-ROM to any ST
- Componium £CAll
New music software
- Dictionary Disks £34.99
German, French, Spanish...
for That's Write
- Digital Box £CAll
Digital interface for MUSICOM
and TrakCom
- Epson Stylus/570 fonts £14.99
WO and TW fonts disk
- Epson Internal fonts £12.99
Epson LQ850 and Canon
BJ10ex support
- Fontbit £CAll
The bitmap font editor
- Hard disks £CAll
Most use MiniS system
- HP DeskJet 500 £14.99
WO and TW printer driver
- Imagecopy 2 £19.99
Screen grabber, converter and
colour printing
- Internal Disk Drive £19.99
Refurbished at special price!
- Memory Upgrades £CAll
All kinds of memory stocked
- MUSICOM 1 £49.00
Classic direct-to-disk recording
- MUSICOM 1 to 2 upgrade £29.99
- NeoDesk 2 to 3 upgrade £9.99
- NeoDesk 3 to 4 upgrade £29.99
- Portfolio £49.00
Atari's classic palmtop
- Portfolio Modem £79.99
- Portfolio Chess £19.99
- Portfolio 256K card £79.99
- Portfolio Linkscard £19.99
- Repairs from £20.00
- PicoH Laser Toner £34.99
Limited stock
- Spare - Atari full range £CAll
- SPEEDO font packs £CAll
New range of affordable
SPEEDO fonts
- SPEEDOGDOS Upgrade £CAll
Upgrade to the latest
SPEEDOGDOS - coming
soon
- ST Mono Monitors from £129
- That's Write 1.5 to 2 upgrade £29.99
- That's Write 2 to 3 upgrade £CAll
- Write ON to That's Write 1.5 £24.99
- XACC Specification Free
Send disk and see to COMPO
or on CIX
- Zoom £CAll
Colour ICON editor

**No-nonsense money
back guarantee.**
If you are not
completely satisfied
with anything you
buy from us, return
it within 30 days for
a full refund



£129

That's Write 3
Due out at the end of July.
Probably the most powerful ST
word processor produced.



£229

CompoScript
PostScript printing to non-PostScript
printers. Great for previewing PageStream
documents before typesetting.



£79

TrakCom
The new standard
tracker for the Falcon.



£249

ScreenEye
Real-time video digitis-
er and screen grabber
for Falcon.

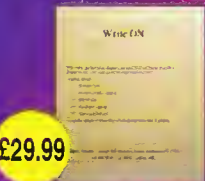


£TBA

**SpeedoGDOS
New Release!**

Features include:
Type 1 font support
TrueType font support
Colour enhanced

SPEEDOGDOS
New version with enhanced
colour output, Type 1 and True
Type font support available soon.



£29.99

Write ON
Classic word
processor for the
novice/hobby user.



£79

MUSICOM 2
New version now available.
Features include cut and
paste, mixing and much more.



£49

Studio Photo
24-bit Photo retouching
and image editing for
all STs and Falcons



£12.99

Ultimate Virus Killer
Essential for any ST
owner. New version out
now.



£199

Falcon Speed
286 emulator for Falcon including
colour Windows driver.



£17.99

STeno
Text editing accessory
for Stalker.



£99

Arabesque Pro
Powerful vector and
bitmap graphics program.



£64.99

T-Board 68
Switchable TOS 2.06
upgrade for STe.



£129

AT Speed
TOS-based emulator for STs.

**ORDER BY PHONE,
9.30am to 7pm
Mon-Fri,
10am to 5pm Sat**

Atari
Best Range, Best New Products, Un

ATARI



£129

Telephone Control
Advanced 'answering machine' system for Atari
Falcon. Change messages at the click of a mouse.



£TBA

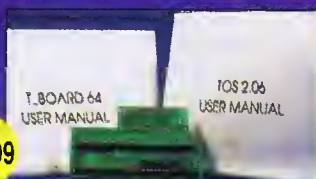
That's Address 2
Due later this year. That's Address 2 is a complete
name and address management system.



£9.99

COMPO Software

Studio Convert
Universal picture
conversion tool
includes JPEG
and Photo CD



£64.99

T-Board 64
Switchable TOS
2.06 upgrade for
STfM.

**ALL PRICES
INCLUDE VAT AND
DELIVERY TO UK
MAINLAND. CALL
OR POST THE
COUPON FOR A
FREE CATALOGUE**

SEE US AT
EUROPEAN ATARI
SHOWS BRISTOL
AND LONDON

COMPO

HUNDREDS OF PRODUCTS FOR THE ST, TT AND FALCON

FOR EVERYTHING TOS, COMPO SOFTWARE HAS
OUTLETS IN GERMANY, HOLLAND, FRANCE,
USA AND UK. A TOTAL SERVICE INCLUDING
HARDWARE, SOFTWARE, FITTING & REPAIRS.

Buy from COMPO Software and reap the rewards!

- ★ Widest range of ST Hardware and Software listed in our free catalogue
- ★ FREE technical support when you want it – open 3pm to 8pm every weekday
- ★ Convenient ordering – 9:30 am to 7pm Monday to Friday, 10am to 5pm Saturday, or by 24 hour answering machine outside these hours. 24 hour fax orderline
- ★ Dedicated COMPO conference on the CIX bulletin board for modem owners
- ★ Showroom opening shortly dedicated to hardware and software for TOS computers
- ★ Stable and secure company. Over seven years in the Atari market (four years in the UK) with worldwide sales and marketing
- ★ 48 hour despatch for items in stock – check availability before ordering by post if you need this guarantee
- ★ Free delivery anywhere in the UK. Add £5 for guaranteed next day delivery in the UK, £51 for carriage to mainland Europe and £101 for Rest of World
- ★ Easy payment accepted   
- ★ Additional charges may apply for bulky items such as computers and monitors – check when ordering these items

COMPO Presents MUSICOM 2 now available!

The brand new MUSICOM 2 is here. Digital Audio for the Falcon that even the non music-minded can use. Version 2 costs £79 and upgrades are, of course, available from MUSICOM 1. Registered users should already have their upgrade information by mail; if not, call COMPO.

Just pick up the phone and you're on your way to talking to the Atari experts. Because all we sell is Atari hardware and software we like to think we know a bit about what we are talking about. We're happy to take time to understand what you want to achieve, and then recommend a solution. Choose from our wide range and have it delivered to your door in just a few days.

As well as our own product range COMPO Software is also exclusive UK agents for:

Gribnif, Atari UK (for TOS upgrades), Overscan

We also sell products from many other companies including:

Atari (complete product range), CGS, Titan Designs, System Solutions, Marpet Developments



Sales and Enquiries UK: 04873 582
Sales and Enquiries USA: 415 355 0862
24 Hour Fax UK: 04873 581
24 Hour Fax USA: 415 355 0869
Technical Support UK: 04873 521

**COMPO Software Ltd, Unit 3 Green Farm,
Abbots Ripton, Huntingdon PE17 2PF**

All prices include VAT and Carriage. All trademarks and Registered trademarks acknowledged. All prices subject to change – confirm prices when ordering. Products offered subject to availability.

SEND FOR YOUR FREE COPY OF THE COMPO SOFTWARE CATALOGUE.

Please rush me my FREE copy of the COMPO Software Catalogue.

Name Company

Address

..... Postcode

Telephone Fax

Mail to COMPO Software Ltd, Unit 3 Green Farm, Abbots Ripton, Huntingdon PE17 2PF.



£49

Autoswitch Overscan
Enhanced screen display for any STFM or Mega ST. Essential for DTP and Music.

£79

Screenblaster
Now with new v2 software – fully configurable and comes with NVDI.

£39.99

TOS 2.06 ROMs
Replacement ROMs for STe computers only.

£49

NVDI 2.5
Blindingly fast software accelerator for all TOS computers. Essential for all STs, TTs and Falcons.

£59

Geneva
Multi-tasking for all STs. Includes full support for AES 4.0 – all STs get Falcon-like interface features.

£29.99

Maths Co-processor
68882-25 co-processor for the Falcon. Essential for Ray Tracing, morphing...

£59

NeoDesk 4.0 New Release!
Features include: Multitasking support, Grouped objects, Much, much more

£19.99

NeoDesk CLI
Add the common used functions of a command line interface to NeoDesk.

£19.99

NeoDesk 3
The classic desktop replacement.

£64.99

PC Speed
The best selling hardware emulator for the ST.

£39.99

STalker
Powerful commercial communications software packed with features including background Z-Modem file transfers.

£49

Interface
The ST resource file editor – new version 2.3 with 3-D effects. English software but with German manual.

£79

Connector
Easy to use, fast autobrace program. Includes a special TT version that uses maths co-processor.

Atari 520ST

£59

Kobold
File management utility. Super fast copy, delete, format...

£299

ColorBurst
Falcon true-colour hand scanner.

£9.99

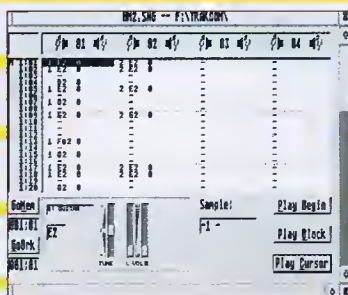
Screenblaster Upgrade
Software upgrade for Screenblaster.

Available Service!

Laying down



About box pops up every time the program runs



Main song editing window



As any Falcon owner knows, our bird of prey comes with very powerful sound processing hardware as standard. All you need do is connect a pair of speakers and a microphone and off you go.

Oh yeah, you need software too. But what do you do after you've recorded the sound? Well, you play it back. But the novelty of this soon wears out too...

Enter TrakCom, the latest product from Compo. This lets you combine sampled sounds into a ten-track sequencer. But TrakCom is much more than a sequencer.

It also lets you edit samples and combine them into songs. So the best way to describe TrakCom is to say that it's an integrated software synthesizer with a built-in sequencer.

The first thing to do is try out some of the demo songs. Although impressive at showing off TrakCom's features, there is no accounting for taste and yours truly, to put it very mildly, don't care much for techno... So, time to get those creative juices flowing and make us some real music.

Samples — or instruments as the TrakCom manual calls them — must be imported from a separate hard disk recording program such as MusiCom. Such a sampler is also useful to add effects and generally polish up the sound before importing it, although TrakCom itself has some interesting editing features.

TrakCom can import both AVR and DVS samples. These can be in stereo, but TrakCom will combine them into mono before importing. This is because each sample is really considered an instrument destined for one track and stereo panning comes later.

If you insist on stereo you can do it but it needs more work — the stereo sounds must be sampled twice, once for each side, and then loaded into two separate tracks. Finally, TrakCom can read mono .SND files also known as .AU files common in the Unix world.

Importing samples involves double-clicking on an empty slot in the sample list window and selecting a file from the file selector. This will also assign a number to each instrument which is automatically

used during songwriting.

Double-clicking on the imported sample invokes the sample editor. Samples can be reversed, that is to say played backwards. They can also be made louder or quieter.

An interesting feature is the ability to attenuate or amplify only a portion of a sample for seamless joining and looping. The whole sound graph can be moved "up" and "down" or even "centred". This will eliminate occasional clicking sounds at the sample start or end. Samples can also be trimmed at both ends.

A couple of sliders are used to "tune" the sample. This is the basic pitch before transposition. Using signal processing, any sound can be turned into several octaves by the process of transposition. To help with testing there is also a test tone and the keyboard has been overlaid with a piano layout. Pressing "q", for example, will produce a C.

COMPOSING

Having created and tuned all of the instruments, the time has come to start composing. The first thing to do is set the song parameters. Lines pro Pattern is the number of displayed lines per sampled pattern. It's used for orientation, so meaningful values such as 16, 32 or 64 for a quarter note should be used.

Lines pro Shift indicates the number of lines the song display will jump when shifted cursor keys are pressed. The maximum value is the length of a pattern. Lines pro

Second determines the playback speed. However, changing this in the middle of a composition will most likely not work as the actual sample playback speed does not change and the samples may get out of sync.

There are also a number of global options which can be set: a selection of fonts for buttons and alert boxes and the sample list font can be altered.

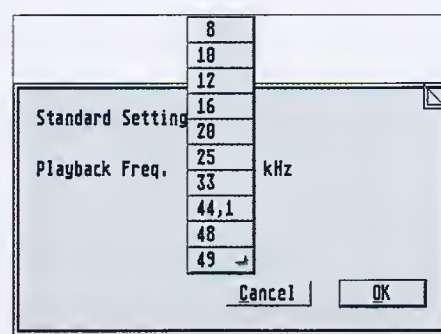
Playback speed ranges from 8 to 49 kHz. Normally this ought to be set as high as possible but some songs with a high number of tracks may require a lower frequency in order for the DSP to cope.

TrakCom uses the DSP (digital sound processor) in the Falcon to process the sound. Although this processor is very fast it has its limitations due to large amounts of data contained in samples. The size of a sample is directly proportional to its resolution and sampling rate. For example, the DSP can handle up to six tracks of 16-bit samples at the highest Falcon rate of 49 kHz. So reducing the rate to 25 kHz will enable the DSP to process and transpose up to eight tracks in real time.

The songs are created in the song editor window. It helps to have this



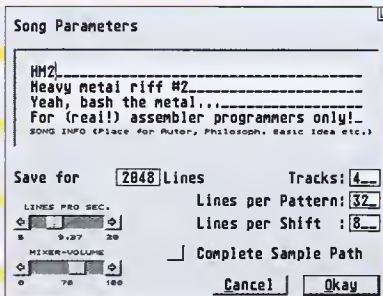
A list of all available menu functions



Frequencies available for replaying

Traks

Don Maple samples TrakCom from Compo, an 'integrated software synthesizer with a built-in sequencer'



Song parameters

window as large as possible so BlowUp or Screenblaster are highly recommended to increase desktop resolution. Initially all tracks will be empty which is indicated by dashes. Individual tracks can be turned on and off by simply clicking on the track number. The current position is marked by an inverse "cursor" bar.

To enter a note, a sample must first be selected from the sample window. Then, in the song editor window, the cursor is moved to the desired bar using cursor keys and the note is "played" from the keyboard. That's all there is to it.

PROGRESS

As the note is entered it is also sounded, so corrections are easily made and you can peck around the keyboard until the correct note is found. To check the progress, the song can be played from the beginning, from cursor position or you can play a single block. Notes entered in error can be erased with the space bar. There is also a memory marker to easily navigate through a larger song. You can jump straight to the marker or to the last played position.

Whipping out the guitar sample, we can now try some serious brain-damaging HM riffs – none of that sissy techno stuff here... And it works amazingly well! HM fans are usually hackers and TrakCom provides for them too. All song files with

Samples			
-1	-		
0	SILENCE		
01	RHYTHM	243k	F1
02	HIP	36k	F2
03	DA	40k	F3
04	RUN	49k	F4
05	NER	60k	F5
06	VON	58k	F6
07	DEM	70k	F7
08	HAUS	86k	F8
09	ORIGINAL	95k	F9
10	ORIGINAL2	181k	F10
11	ORIGINAL3	94k	⇧F1
12	MEGABEIT	123k	⇧F2
13	2SNAP	15k	⇧F3
14	BASS	38k	⇧F4
15	-		
16	HAKAB	43k	⇧F6
17	-		
18	-		
19	MODMUELL	8k	⇧F9
20	RHYTHM	243k	⇧F10
21	-		
22	-		
23	-		

A list of loaded samples

extension .SNG are actually plain ASCII files which means the songs can also be created and modified using a simple ASCII editor. The manual lists the exact format of the .SNG file. ASCII editing works like magic too and a simple riff quickly took the shape of a song.

Each individual track can have an unlimited number of instruments (samples) but up to 100 instruments are allowed per song. You can even mix samples taken at different rates within the same song! TrakCom is also capable of loading songs created by the MJUZAKK program.

With the Compo Digital Audio Interface (not tested here), TrakCom can be used to process and copy digital samples from CD to DAT without any loss of quality. Furthermore, any TrakCom song, regardless of its original sampling rate, can be exported using this interface in either CD (44.1 kHz) or DAT

(48 kHz). With high quality samples this means professional quality masters.

All the information in the manual is presented succinctly and in a relaxed and amusing manner – a nice change from normally dry and dull computer manuals. The German ring-bound manual with this preview version is being translated for the UK release.

Even though you can pick up a real synth fairly cheaply these days, thanks to miniaturisation and digital electronics, TrakCom is an excellent alternative for Falcon owners. Besides, with TrakCom you are not limited to pre-programmed sounds but can sample any sound under the sun.

The only shortcoming is the inability to sample directly but, instead, having to rely on external programs. It would be nice if the next version rectified this. On the other hand, if you already own MusiCom then TrakCom is an ideal companion program. In any case, once the samples are imported, and assuming they are of a high enough quality, there is nothing preventing anyone from creating CD-ready professional quality songs.

After a very short time TrakCom became second nature as my own little masterpiece took shape. Watch the Top Ten in the near future...

Installation

TrakCom comes on four double-sided disks, although the program itself takes up only a portion of the first disk. The remainder, as well as the other three disks, contains various demos and numerous samples. In this way you can start making music right away and roll your own samples later.

Although there is no installation program as such, installing TrakCom is quite straightforward. It involves simply copying all four disks to the same partition on the hard drive. This will create a folder called TRAKCOM with all files already inside. However, some of these files are compressed.

In the TRAKCOM folder is the program itself and another folder called DEMO which contains compressed samples and demo songs. These files are self-extracting and have the extension .TOS so all you need to do is double-click them.

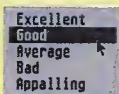
In total, the installation uses up some five megabytes but after removing the compressed files TRAKCOM will occupy about three megabytes of hard disk space.

The program is now ready to launch and it greets the user with the "About" dialog box. This is OK the first few times but since it requires a click to get rid of it, the box becomes a nuisance after the program has been run a few times.

BOTTOM LINE

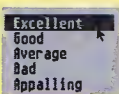
FEATURES

Many fantastic features but lack of built-in sampler is unfortunate



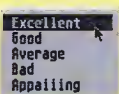
EASE OF USE

Very clean, easy to use and intuitive user interface both in menus and windows



VALUE FOR MONEY

Considering the costs of real synths/sequencers, TrakCom is a bargain



Product: TrakCom
Supplier: Compo, 7 Vinegar Hill, Alconbury Weston, Huntingdon, PE17 5JA
Telephone: 0525 718181
Price: DM199 (about £80)
Configuration: Falcon, hard disk, 4Mb of RAM, minimum resolution 640 x 400

Electronic mail

Walk round any modern office anywhere in the world and you'll usually find that their main method of communication is via E-mail, a fast and efficient way of sending info to someone anywhere in the world.

Unlike the telephone where the person may be out, or a letter that may be lost in the post or delayed for a couple of days, E-mail drops your message off in the recipient's computerised "mailbox". It's also possible to have a receipt in return so that there are no arguments later.

Another excellent feature is the ability to send the same message out to as many people as you wish. Instead of making telephone calls or posting off individual letters, simply tell the computer which people you wish the document to be sent to and it's done.

The likes of CompuServe offer the user the best worldwide E-mail systems, making the commercial boards even more tempting to the browsing buyer.

Faxes, telephones and letters will soon be things of the past.

Information Technology is the next generation in human communications, offering a wealth of opportunities for the user to take advantage of. With a modem and computer, the communications world is your oyster.

By contacting the various conferences, BBS bulletin board systems and using E-mail, info about nearly any subject from Swiss offshore banks and golfing umbrellas to rather sad Doctor Who and Star Trek facts can all be downloaded to your machine.

If you own a business, the likes of CIX, CompuServe and Internet can put you in touch with suppliers, partners, agents, new customers, market intelligence and other valuable resources.

Even without a company logo, an individual has access to a wealth of information, whatever line of work or walk of life they come from. A conversation via keyboard can be carried on between a sales rep in Thailand, a manager in New Zealand and a customer on the Ivory Coast – deals can be struck at the stroke of a key.

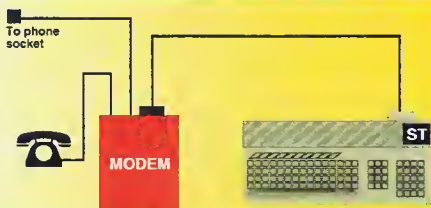
The system is a dream come true for

CIX, CompuServe, Internet and the Superhighway offer the user vast amounts of information. Adam Phillips reports on how this data can be accessed from an Atari machine

researchers and journalists – a search exercise can cost less than ten dollars to access many megas of vital resources that, if done via traditional methods, could take an afternoon in a library and a couple of hours on the phone making international phone calls.

With the likes of the PC dominating the world's computer market, there are often queries at ST User how this database of world knowledge can be accessed by the low-end computer

The beginner's guide to



Around the world in eighty seconds

There are many services available to the user all round the planet. For the uninitiated here is a brief look at the four main networks:

CompuServe

Based in the States, CompuServe is a huge online service that boasts a rather substantial membership of two million and 45,000 in the UK. Despite the service being based in America and charging in dollars (keep an eye on those rates of exchange), CompuServe has access points all over the planet.

Fortunately, if you're dialling somewhere in Britain, the calls come at the standard rates so at least some money can be saved. The rates for European members start off at about 8.5p a minute to gain entry to CompuServe during peak hours (8am - 7pm weekdays).

Staying within Basic Services, which includes E-mail during off-peak hours, the usual price will be £6 a month for the use of the service. If you want more than just the basics, Extended Services, which includes bulletin boards costs around 5.5p a minute for low speed access and 11p a minute for high speed.

Premium Services has the rather high price of £6-£10 an hour but, for your money, you'll be able to access 2000-odd databases.

Also take into consideration that there are some 700 leading hardware and software companies available to provide the user with some serious support. Add to this all the new services specifically created for the UK market (no surcharges in other words) such as access to the Press

Association Newswire, hotel and restaurant guides, TV listings, reviews of the latest books, movies and many others, you have a very comprehensive and versatile system.

CIX

CIX (CompuLink Information Exchange) has been developed to be accessible without a degree in computing science, nearly anyone with a computer and modem.

CIX is a command line based system that, while a little unnerving at first, can be picked up with surprising speed and requires the use of command words to call up the facilities you need.

Also available on CIX is an Internet gateway for those who want to experience what is the closest thing to the data Superhighway.

The structure of CIX is basically one big, conferencing bulletin board. Anyone can join and set up their own area of discussion about nearly any topic and once passed by the powers that be, the sky's the limit.

Fortunately for ST and Falcon users, CIX caters for all major comms standards and costs a base rate of £25 to join which includes a user ID and full, printed manual. Rates begin at 6p during peak hours (8am to 5pm) and 4p at all other times.

The good news for owners of fast modems is that no additional charges are incurred for using one. This means that while you may splash out more on a high speed modem at first, in the long term, after saving

Hardware

To gain access to the mountain of information on offer, as well as needing a relatively substantial bank balance, a modem is an essential part of the proceedings.

This little black box sits to the side of your machine and is a combined modulation and demodulation device (hence the name). This means that the modem "modulates" information from the ST into a form that can be sent via a telephone line to the computer at the other end which then "demodulates" it.

The most important feature to consider when buying a modem, is its baud rate – this basically dictates how fast information is downloaded to your machine. The longer it takes, the higher the phone bill and in some cases, the surcharges on a particular service.

When buying a modem, think of long-term expenses. Going cheap on the initial purchase for a slow modem could result in a loss of money over the coming months because of the time wasted downloading and uploading with a slower baud rate.

Prices these days for ST comms are exceptional value for money. A year ago, £150 would have bought a modem with a 2,400 baud rate. Nowadays, prices have tumbled to a respectable level and a fax modem running at 14,400 bps (bits per second) can be picked up for a very reasonable £159.99.

Another crucial requirement is that your modem is Hayes compatible.



market. More specifically how the ST and Falcon can find an enviable position on the Superhighway.

In the beginning, comms was always an anorak's domain – overly complex operating systems and long lines of fiddly coding were commonplace and hampered most people from just setting up their own machine. In the last few years, things have taken a turn for the better, easier connections and cheaper, faster hardware and software being the initial

improvements.

Now, with the privatised telephone industry, British Telecom and Mercury are constantly knocking pounds and pences off the price of phone calls to gain custom. This is good news for technophiles when coupled with the fact that major providers of the various commercial networks available to modem users are also reducing their charges as more and more people hook in and log on.



Contact numbers

CIX
0492 641961
CompuServe
0800 289458

communications

money on smaller connect charges as well as on telephone bills, the hardware will pay for itself over the coming months. Faxing starts at 30p a page in the UK, 70p for the first page and 45p for subsequent pages in Europe and £1.75 for the first page and £1.25 a page thereafter for the rest of the planet. Charges for using the system start at a monthly minimum charge of £6.25 plus services used. Businesses can set up an account where the minimum monthly charge is £15. Unfortunately, the entire system only has one CIX access point down in London. This means that any of us mere mortals who live outside of the Big Smoke, could up end with phone bills that have a sting in the tail if they aren't monitored closely.

Internet

While Clive James witters on about the Superhighway of information every Saturday night, the Internet, though not quite realising this dream, is quite sufficient for the time being.

The system is massive; four million users and some 11,500 sites worldwide make the Internet, at present, a force to be reckoned with. Before jaws hit the ground though, the service is also one of the most unwieldy and techie-based computer jungles of all.

The language used to access the humungous mountains of data is predominantly Unix. If you're fluent with this operating system then you'll be fine, but for more humble computer novices it's best to concentrate on the various access points that can be found in CIX and CompuServe.

Seen by some as the best feature and by others as the worst problem, the Internet has no overall controller. Unlike CompuServe and CIX, there are no directories listing numbers, so if you want a piece of information you're going to have to hunt the number out. Better still, go to your local Waterstones and buy a guide to the Internet.

The Whole Internet User's Guide and Catalog comes highly recommended. Aimed at the first-time user, this tome by Ed Krol offers a wide variety of useful information and lists some of the services you can use. At £18.95 it's not exactly cheap but as a comprehensive foot-in-the-door guide, it's an excellent buy.

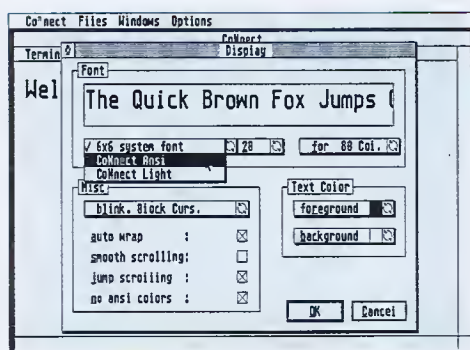
Two of the best ways for an individual who isn't interested in a business account to join the Internet is via CIX (simply type in TELNET at the prompt) or via Demon on CompuServe. The rates for the latter are £12.50 to join and £10 for each month with no further charges.

Bulletin boards, private or otherwise

If all this talk of money and intricate operating systems is putting you off a little, there are an abundance of independent bulletin boards to lose yourself in. A call is charged at the usual BT rates and there is enough on offer to make the connection fee worthwhile. Various companies such as Seiko and Shopper have question-and-answer sessions for customers and will normally give you a response within 24 hours.

For a list of some of the numbers available, check out the BBS Directory available from Goodman International.

CoNnect, a German shareware title, offers superb value for money



Software

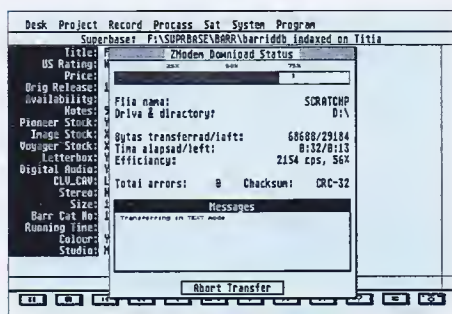
The next key element in the comms process is a good communication program for your ST or Falcon. If you don't have a competent piece of software and kit then the likes of CIX and CompuServe are fundamentally a waste of time.

An efficient and useful package will help you with down and uploading, offer auto dialling and feature a large amount of terminal emulations. The latter is vital – the world is full of different terminal formats. So having a program that can communicate with them all is important especially when you're working with something as unrecognised in the global community as an Atari ST or Falcon.

CoNnect, a shareware title, is an excellent all-round package, offering several valuable facilities such as opening several terminal windows at the same time, a wide range of terminal emulations including graphics capabilities as well as the usual text and even the potential for turning your ST into an answering machine.

STalker is another highly regarded piece of software that, unlike CoNnect, is a fully fledged commercial package priced at £39 and available from Compo Software. Although powerful and versatile, STalker can be used as a desktop accessory with drop-down menus available at the top of the window.

This means options such as downloading and uploading can be moved to the background while you busy yourself with other tasks. Other features include the ability to log on to your own machine if you are using someone else's terminal, the option to use differing file transferring such as Xmodem, plus the more modern and efficient Ymodem and, you guessed it, Zmodem protocols.



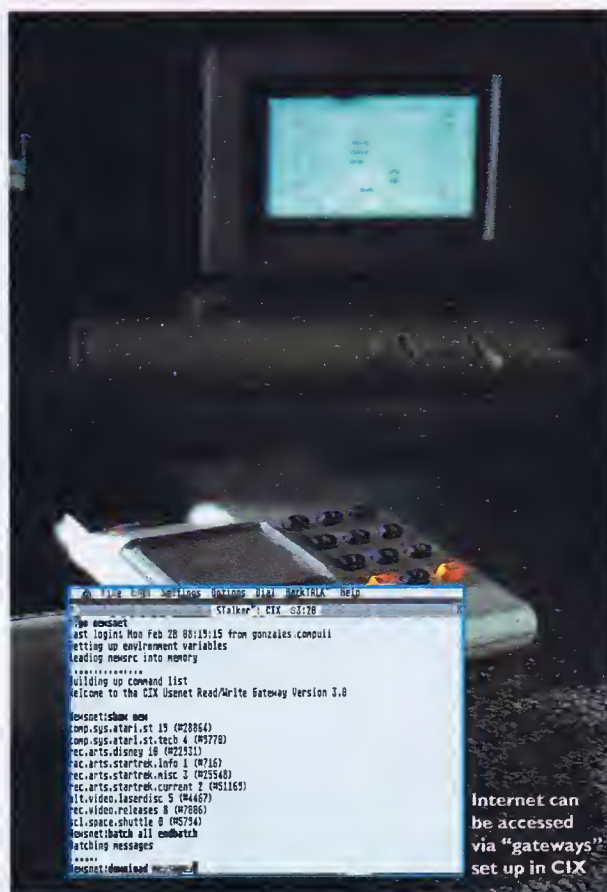
STalker comes highly recommended for comms use

Finale

While we are still cruising on the information A-road waiting to take the turn-off onto the Superhighway, there is already a huge storage of data to be accessed with the current set-up. For businesses, whether you are a corporation using Power PC's or a small shop using an ST, comms can offer the user so much.

Even for the individual who uses it for no more than a hobby, there will be some point in the future where being a member of Internet will be as, if not more, important as having a phone or a fax.

A word of warning though: with the entire world at your fingertips and comms being one of the most addictive pastimes, keep an eye on the phone bill. Staying on line to Australia for twenty minutes researching Aboriginal law will give exclusive insights into a report or study but your bank account may well feel the strain after a while...you have been warned.



Internet can be accessed via "gateways" set up in CIX

Jargon buster

Archiving: Squashing programs and files down to fit in to the smallest memory space possible. Archivers are used to make downloading and uploading times shorter to save money.

Baud rate: This is a measurement of the speed at which a modem transfers its data. A rate of ten baud means that the modem transfers one character per second.

The minimum baud rate you should consider is 2400 (costing around £99) and even this is slow by today's standards. It's important to keep in mind that if the services you are accessing only have modems that run at 2400, there's little point in investing in a 19200 bps modem – it won't speed up the process.

BBS: A computer configured to accept incoming calls and act as a central file and message database for its users. It is monitored by a Sysop.

De-archiving: Once you have the archived material, it's time to de-archive it so it can be used.

Download: The process by which you take information "down" a telephone line from a remote computer and bring it onto your machine.

Offline reader: An OLR is a money-saving program which is designed to minimise your time on line. It will place your messages on a BBS, download any messages for you from the BBS, transfer any other files to and fro as specified, and then let you do your reading and replying at leisure, long after the modem has been disconnected from the telephone.

Online: A term used to describe any time when your computer is actually connected to another machine.

Sysop (System Operator): The person who controls the BBS is a Sysop. They are in a position to offer you advice and help if you should happen to stumble in to difficulty.

Upload: The opposite of download, you upload a program when you send it from your machine to another computer or BBS via the phone line.

Aussie Atari support

I am writing in a somewhat annoyed state after having found out that, after just recently buying myself a 1040 STE, Atari have shut down their offices over here.

In 1992 I had a 520 STFM and got most of my software through a public domain company on the mainland. They have either moved or have also closed down.

I don't know if there is even an Atari user group operating near my home town of Hobart. So, if you print this letter, could you include my name and address in the hope that some Atari public domain library or user group may get in touch with me?

It's a shame that a machine as good as the ST is so under supported here in Australia.

One bit of interesting news is that Amiga users are also howling that Commodore have also shut down over here.

S. Botak, Tasmania, Australia
Consider it done. If there are any PD libraries or user groups who can help Mr Botak, you can contact him at the following address: 3146 Tower Road, Newtown, Habart, Tasmania 7009.

Atari CD-ROM

I see that there are dedicated Atari CD-ROM disks gradually becoming available. Does this suggest that we can finally start to see the ST catching up with the current explosion of the so-called multimedia market as seen on the PC?

If so, how available are CD-ROM drives and are they easy to connect to the ST?

J. Hewlett, Northamshire
Unfortunately, your bog standard ST is a little short of being a true multimedia machine. It simply doesn't have the graphics and sound capability required to contend with the PC.

The Falcon however, will make an ideal multimedia machine. With its CD-quality sound and 32000 plus colour graphics, it's more than a match for the PC. All we need now is software to take full advantage of what the Falcon's enhanced technology has to offer.

Since the release of the Atari-dedicated CD-ROM disks, there seems to have been a noticeable increase in the availability of CD-ROM drives. System Solutions seem to be leading the way here, selling the Apple 300 CD-ROM drive, together with appro-

Young and old, and from as far away as Australia,
ST Users come in all shapes and sizes

Write Now

prate leads and ExtenderDOS driver software to connect it to any Atari computer.

System Solutions also stock Atari-specific CD-ROM disks such as Gemini and Bernd Lohium disks volumes 1 and 2, with two new CD-ROM titles soon to be added to their range.

Prices for the drives start from £249 and all units are plug in and go. If you are interested, you can contact System Solutions on 0753 832212.

Help at last

I was extremely interested to see the news piece in the July issue about Silica Systems opening stores nationwide and bringing with them the "innovative" idea that people selling computers should be people who understand them.

I for one will be welcoming them with open arms. It will make a refreshing change to be able to talk to someone who actually knows all about the product they are selling.

I, probably like so many others, have become completely fed up with obviously computer illiterate sales people in a major high street store looking totally bemused when faced with even the most basic computer-related questions. Hoorah for Silica I say.

S. Strickland, London

Computer stores having on-site technical and advice service is certainly something new to the overage high street computer shopper.

No doubt natives to computers will be breathing a sigh of relief at having a place to buy a computer where they can be

assured of expert advice. So once again, hoorah for Silica.

Full-priced games

With ST games becoming ever scarcer, why don't you put full price games on your coverdisks? Obviously this can't be done month after month, but surely the odd game every few months would be OK?

I also buy the other two ST mags and I'm tired of seeing word processors, utilities and art packages.

A. Moore, Somerset

Unfortunately, all magazines are prevented from placing full price games on their coverdisks due to regulations laid down by ELSPA (European Leisure Software Publishers Association).

The reasoning they give is that such distribution of games would damage the games industry. This is quite possible and could only mean a quicker decline of an already disappointing level of support from games software houses.

Shareware whinge

I am fed up with the ever present "whinging" document file which comes with all shareware programs requesting that people send money to the author in order to register their copy.

I have registered four shareware programs and have never heard a thing from the authors.

C. Delaney, Peterborough

On the whole, the shareware system works very well. However, you must remember that these authors are writing programs in their spare time and must reply personally to possibly hundreds of registered users.

You also failed to mention which programs you registered as well as how long ago you sent off the fee, so it's difficult to comment on your particular case. I would think that yours is an unfortunate but isolated incident.

Gizza job

When I leave school, I would like to write for a computer magazine. Can you give me any hints and tips on how to go about getting a job on a computer games mag?

I have had an STFM for 2 years now and my dad has a PC and my little brother has a SNES. I play games all the time as well as using word processors.

Sorah Tilley (aged 12), Humberside
Well Sorah, I would normally say most computer magazines need good writers who can also come up with interesting ideas for features. Which means sending in an example review of a game as well as a list of as many ideas for features that you can think of. Oh, and you'll also need to include your CV too. But you won't have one of those yet will you?

However, it seems your Mum did the pasting of your letter for you because I found a little note from her suggesting that I also tell you that you need to do your school homework before even switching on a computer, as well as never arguing with her when it's time to stop playing games and head off to bed.

So, I'm afraid you'll have to add those extra bits on to my list of hints and tips too.

One final tip: Maybe you could use the £25 to bribe your brother into doing your homework for you. Just a thought.

£25
Prize
Letter

Waiting to hear from you...

To join the ST chat show drop a line to
The Editor, Write Now, Atari ST User,
Europa House, Adlington Park,
Macclesfield SK10 4NP

Exactly a year ago, we reported on the fast-growing practice of disseminating pornography including hard-core porn using computers, such as the ST and Falcon. We showed how, using modems and telephone lines, material could be distributed across international borders. We demonstrated how easy it was to do, and the variety of still and moving images available.

We exposed how children had been caught passing such material around on floppy disks in school playgrounds, and highlighted the problem of how easy it was for a child to conceal such material at home from non-computer-literate parents.

The article concluded by reporting possible forthcoming legislation to tighten up the law on this subject, but doubted whether telephone lines could ever be properly policed morally or practically.

Since then, public concern has risen, with numerous television programmes going over the same old arguments and problems, and many major investigations in the press. The original *Atari ST User* article was extensively quoted in *The Guardian* newspaper and the *Reader's Digest* magazine, for example. Until anabolic steroids really take off as the next media-led moral panic, pornography of this type looks set to continue to dominate the headlines.

Here then, we summarise recent developments.

It once meant little to most people. Like virtual reality, multimedia and networking, computer pornography lurked in the realm of hi-tech phrases which had little to do with the real world for the majority of adults.

Not any more. With media interest running at an all-time high, computer pornography has been catapulted into the public conscience.

Colin Jack was a married, middle-aged man living in rural Norfolk. Last summer, police acting on a tip off swooped on his home to discover a major telephone-led, computer porn distribution network.

"This was hard core material, sex,



The Home Secretary Michael Howard has so far failed to turn the Commons Select Committee's recommendations into law

Committee at the Houses of Parliament published a report on computer pornography. One of its recommendations involved a tightening of the law to cover the legal loopholes surrounding electronic data.

The problem is that while it is easy to prove that a magazine or video is pornographic, it is a different thing entirely prosecuting someone on the strength of a set of electronic bleeps passing along a telephone line.

"There is immense public concern about computer pornography," said Sir Ivan Lawrence, Conservative Chairman of the Committee. "The technology

Computer still the

As the techno pornographers continue to outpace the law and Government legislators dither, Phil Morse returns to the subject he first reported on a year ago to monitor developments

bondage, torture. It was far worse than anything you'd find in the shops," explained Sergeant John Ashley of Greater Manchester Police's Obscene Publications Squad.

Mr Jack was sentenced, pending appeal, to five months imprisonment, and the subject was suddenly top of the country's moral agenda.

In February, a Home Affairs Select

advances that have been made recently have been moving ahead of the law." The law as it stands bans importing pornography in any "tangible" form, and this is where modem-transmitted pornography escapes the law's exact wording.

Labour MP Steve Byers said: "To take an extreme case, imagine that a perverted teacher calls up a number in the Netherlands on the school computer.

Snubbed

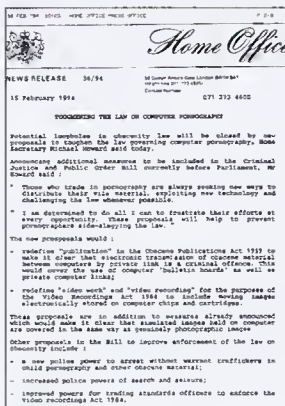
The Home Office Select Committee made a number of considered recommendations to the Government, most of which were not taken up. These included:

- Increasing the penalty for transmitting pornography within Britain's boundaries from £1,000 to £2,500 and three months imprisonment
- Amending the Customs Consolidation Act to make clear that it is an offence to import pornographic material into the country, and to make this offence arrestable
- Clarification of the law to make it absolutely clear that possession of pornography on, say, a

hard disk is as much of an offence as having it on printed paper

- The banning of all advertisements (for instance, in magazines) for obscene material distributed from abroad
- Making training in computers more widely available to police officers, and maybe even inclusion in the CID training course
- Giving guidance to headteachers about dealing with computer pornography, and asking schools to report back on any incidents of porn discovered so as to form an accurate picture of the extent of the problem among children





Michael Howard's limited reforms of the computer pornography laws are announced by the Home Office

whether such cases should go to court or not, and the Police Federation, representing those who would be enforcing the law, share this view. But for some reason, the Government are reluctant to proceed with such law clarification.

With devastating timing, one day after the report a boy of 13's attempted rape of a six-year-old was partly attributed to his viewing of computer porn. Home Office minister David Maclean announced that the Government would not be changing the law.

There are admittedly certain difficulties surrounding the matter. Customs officials warned of the possible

What you can do

- Learn computer basics if you don't know them, so you can at least view the contents of disks found in your child's disk box to check for pornography
- If you access bulletin boards, do not allow your children to do so. And don't let children have modems of their own
- Schools should check their computers for pornography; ensure that staff do. "All schools should teach computer ethics. They're all for teaching children how wonderful computers are, but they should also teach about the harm they can do," says Sergeant Ashley
- Report any evidence of computer pornography you find to the police

porn big issue

He could have hard core pornography, which it would be illegal to buy in this country, transmitted down the line, without breaking the law."

TIGHTENING

Obviously it would be impossible to police every single telephone line coming in and out of the country. But the MPs who made up the Select Committee nevertheless decided that tightening the law in this area would at least allow the police to prosecute fully when – by whatever means – they discovered such activities taking place.

The Crown Prosecution Service, whose job it is to decide

controversial effects of monitoring phone lines. They also pointed to the probable ineffectiveness of mounting such a monitoring service.

But the CPS and many other bodies involved still feel that a change in the law would be beneficial for the reason the Select Committee raised: a full prosecution could at least be brought where cases had been discovered, by whatever means. Some changes in the law have occurred. The

making of composite images is now illegal and it is also illegal to actually transmit data (send it from your own computer to someone else's) if that data is pornographic.

The Video Recordings Act 1984, which bans video porn, has now been extended to cover moving images "electronically stored on computer chips or cartridges".

But none of this addresses the problems highlighted in the Select Committee's report, because if you access porn from a bulletin board in, say Norway, it is they who are doing

the transmitting, not you.

And technology does not stand still. Hard core pornography is already making its way onto CD-ROM, with all the massive leaps of storage capacity, picture and sound quality that this entails.

The Falcon's vastly superior picture and sound handling can only add to the sophistication available to the computer pornographer. Even porn entrepreneur Paul Raymond is moving in, releasing the whole of his Electric Blue soft porn video catalogue on CD-ROM.

EXPOSED

And with one school headteacher reporting that a third of his pupils own computer equipment capable of viewing porn, and that at least one porn disk had been discovered circulating among them, it takes only a small leap of the imagination to conclude that a significant minority of schoolchildren have been exposed to computer porn.

If the Government continue to ignore the advice of those who have taken the trouble to research the problem, they will have their hands tied in their efforts to find a solution.

Loophole closed

While the authorities still seem to struggle with the technicalities involved in banning many aspects of computer pornography, one area where they have managed to close a loophole is that of so-called "composite" images.

A raid on a house in Watford by Scotland Yard's Obscene Publications Squad, which specialises in cracking paedophile rings, netted a man who was using a graphics package to superimpose a young girl's head onto a naked adult woman's body. By removing pubic hair and shrinking the woman's breasts, he made a convincing piece of still "child" pornography.

At the time, because of the usual technology-outpacing-the-wording-of-the-law problem, he could not be prosecuted. Since then, this legal loophole has been closed in the Criminal Justice and Public Order Bill, which should have been passed by the time you are reading this.

New law likely to end computer porn link

Advances in technology expose obscenity loopholes

THE definition of the 1959 Obscene Publications Act to cover the electronic transmission of obscene material between computers is likely to be changed. The Home Office yesterday suggested that the police powers to seize and destroy obscene material, including electronic data, should be extended to cover the transmission of such material. The new powers would allow the police to confiscate the computer equipment used to transmit such material.

The Home Office yesterday suggested that the police powers to seize and destroy obscene material, including electronic data, should be extended to cover the transmission of such material. The new powers would allow the police to confiscate the computer equipment used to transmit such material.

Minister fails to plug computer porn loophole

THE GOVERNMENT has failed to close a major loophole in the law on computer pornography, a Home Office spokesman yesterday admitted. The spokesman said that the Home Office had not yet decided whether to introduce a new law to close the loophole. The spokesman said that the Home Office had not yet decided whether to introduce a new law to close the loophole.

Bulletin boards put images on screen

Vivek Chaudhary looks at the growth of a new network

WITH a home computer, a telephone line and a modem, a variety of electronic images can be accessed via bulletin boards. These are electronic information systems where users can post and retrieve information. They are often used to share files, discuss topics, and even to exchange images. The growth of bulletin boards has led to concerns about the potential for accessing and distributing obscene material.

VIDI ST (12)

This offers a breakthrough in Multimedia Video. Jammed full of features that are suitable for almost any imaging application. Offering Animation, Image Processing, Image Capture and file support for no less than 3 computer platforms. Image capture is so simple, both colour and mono images are captured in less than 1 second. Images can be displayed in almost any resolution and colour mode up to 740x480 in true colour.

Main features include:-

- Both colour and mono image capture
- No separate RGB splitter or filters required
- Fully functional Animation Workstation
- Mix images to almost any resolution
- All Atari colour modes are supported
- Many Image Processing effects

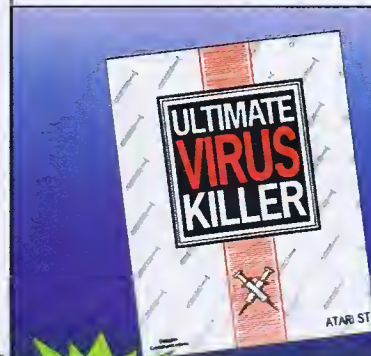


Product	Price	Order No.
Vidi ST (12)	£129 (RRP £149)	9488

ONLY
£129.00

ULTIMATE VIRUS KILLER

Ultimate Virus Killer is the ultimate tool to protect your Atari ST, STE, MEGA & TT computers from virus infection. With this package you can detect, destroy and protect yourself from over 50 types of virus. Leaving your valuable software investment safe.



Product	Price	Order No.
Ultimate Virus Killer	£12.95	9130

ONLY
£12.95

TRUEPAINT

TruePaint is the first art package to take advantage of the true colour capabilities of the Falcon030 computer. Some of the highlights of the products are:

- Works on all ST's and Falcons in all screen resolutions including 768x480 True Colour
- Easy to use Multi-Window environment with menus, toolbox and keyboard shortcuts
- Full range of drawing tools
- A large variety of effects including shear, wrinkle, smooth, rainbow etc
- Flexible zoom, full screen mode with edit, colour picker, bezier curves...
- Animation, Font/Speedo GDOS support, wide variety of file formats including IFF, TIFF, GIF, JPEG, Targa, IMG, Neochrome and more
- Extensive and informative 170 page manual



Product	Price	Order No.
TruePaint	£37.95	9250

ONLY
£37.95

ATARI ST USER READER OFFERS

Order Hotline: 051-357 1275

Fax: 051-357 2813 General Enquiries: 051-357 2961

Order at any time of the day or night. Don't forget to give your name, address and credit card number

VIDEOMASTER

The Ultimate Multi Media System for your computer. Videomaster is a revolutionary breakthrough in home computer technology combining the complexity of a Video Digitiser with a Sound Sampler in a single easy to use low cost unit, to bring you the ultimate home multi media video/audio editing package.

Videomaster will allow you to record monochrome, quarter screen pictures at speeds of up to 25/30 frames per second (Europe/USA) providing ultra smooth playback at high speeds. These pictures can be recorded from the output of a video recorder or directly from a video camera or a camcorder and replayed on your computer screen.

Videomaster can produce great 'grey' scale pictures from any video source with a pause or still frame facility. The colour filters provided in this package will enable the users of video cameras or camcorders to produce high quality still pictures in glorious colour.

Videomaster features a sound sampler as part of the hardware, though the software can be used with external sound samplers. This is supported by a full feature sound

recording and editing program within the videomaster software. The Videomaster system also features a video sequencer.

The complete package contains the Videomaster video digitising and sound sampling hardware unit, TRI-Colour filters for colour camera use, comprehensive user guide and full system software.

Videomaster will work on any standard Atari ST with at least a single 1Mb floppy disk drive and a colour monitor. At least 1Mb RAM is recommended. RRP £69.95, save £15 with this offer.



Product	Price	Order No.
Videomaster	£54.95	9107

ONLY
£54.95

STEREO MASTER

Stereo Master is a low cost, high quality sound sampler for the Atari ST. It includes many features such as:

- Realtime Playback
- Cut or Delete selected sample area
- Filter Sample with hard/soft filter
- Hi-Fi Stereo Playback option
- Built-in realtime special effects including Echo, Reverb, Ramp Pitch up/down and Multi Echo Chorus



Product	Price	Order No.
Stereo Master	£24.95	9240

ONLY
£24.95

REPLAY 16

At last, a low cost 16 bit sampling system for the Atari ST, featuring full 16 bit input and output in the same unit. The system comes complete with a sophisticated sample making/editing program, superb digital Drum machine program, and a powerful MIDI keyboard emulation program which gives the user the ultimate in MIDI sample control.

HARDWARE - The 16 bit sampling unit plugs into the cartridge port of the ST. Audio connections to and from the sampler are provided via standard Phono connectors. An Input volume control is also provided.

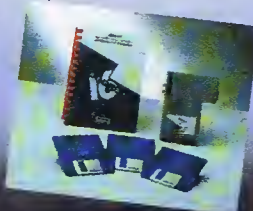
SOFTWARE - EDITOR - The sample editor is a highly flexible 'WIMP' style program which allows conversion or editing between any AVR format 8/12/16 bit, Mono or Stereo samples. Sampling rates of up to 48Khz can be used, but the program can re-synthesise samples to practically any other speed.

Features include: • Volume control • Digital filtering and 3D frequency analysis • Cross fade looping • Record • Play • Fast Forward/Rewind with VCR style controls and much, much more...

DRUMBEAT - A 4 voice polyphonic Drum machine with full MIDI control. Up to 30 different samples can be loaded into a kit at once and 50 patterns can be programmed in either realtime or steptime. Samples can be up to 1Mb in length each.

MIDIPLAY - Flexible keyboard emulator which can cope with up to 128 samples in memory at once. Any sample can be assigned to any note or range of notes in a 9 octave range. Midiplay can play up to 4 VOICE/NOTE polyphonic with 3 levels velocity sensitivity while in single voice mode. An advanced sample loop point editor with AUTOLOOP (Zero Crossing) detection is also incorporated to ease loop point editing.

The system runs on any ST or STE with 502K (1Mb min is recommended), and comes complete with hardware, software and comprehensive manual.



ONLY
£99.95

Product	Price	Order No.
Replay 16	£99.95	9156

RE-INK SPRAY

Save money and the environment with Re-Ink Spray and bring back life to your exhausted printer ribbon. Simple and cost effective, it can save you up to 90% on ribbon costs and gives cleaner, blacker print with no blotches and it works for all fabric ribbons. Just open the ribbon case, spray Re-Ink onto the ribbon and hey presto!



ONLY
£12.95

Product	Price	Order No.
Re-Ink Spray	£12.95	9179

COVERDISKS

Did you miss out on any 1992 **Atari ST User** CoverDisks? If so, now is your chance to obtain our pack of 12 CoverDisks for 1992, and packs of 6 CoverDisks from January to June and July to December 1993.

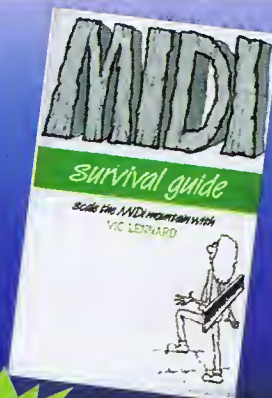


FROM
£9.00

Product	Price	Order No.
12 CoverDisks (Jan-Dec 92)	£15.00	9143
6 CoverDisks (Jan-Jun 93)	£9.00	9145
6 CoverDisks (July-Dec 93)	£9.00	9149

MIDI SURVIVAL GUIDE

Whether you're a beginner or a seasoned pro, the Midi Survival Guide shows you the way. No maths, no Midi theory, just practical advice on starting up and ending up with a working Midi system.



ONLY
£6.95

Product	Price	Order No.
Midi Survival Guide	£6.95	9489

PRO PUNTER 2 PLUS

DO YOU WANT TO INCREASE YOUR CHANCES OF WINNING ON THE HORSES? THEN LOOK NO FURTHER.

Independent comparative reviews confirm that Pro Punter is still the performance benchmark by which all others are judged.

The best racing software... available, The Racing Post.

Officially proven to the racing press and other magazines by sending time and date franked letters by Post Office mail, Pro-Punter has shown that it can predict winners with remarkable accuracy. Pro-Punter is also cautious with your money. If it thinks there is any doubt about the outcome of the race, it will advise you not to bet.

The NEW second generation Pro-Punter is written to professional standards and is attractive and easy to use. It features full editing and review of race data entered and also a unique low-maintenance database that does not need constant updating.

In addition to UK features, Pro Punter 2 contains unique course/going/class editors and will configure to metric weights/distances, thus allowing configuration for racing worldwide.

ONLY
£49.95

Product	Price	Order No.
Pro Punter 2 + (1Mb req)	£49.95 (RRP £99.00)	9110

BINDER & BACK ISSUES

If you've missed any of these issues, now's your chance to put things right, by either buying an individual issue or a full six months' worth. But hurry - stocks are limited! Keep all your back issues in pristine condition with the **Atari ST User** binder a must for any serious Atari user.



ONLY
£3.50

Product	Price	Order No.
April 1994 + 3.5" disk	£3.50	9271
May 1994 + 3.5" disk	£3.50	9272
June 1994 + 3.5" disk	£3.50	9273
Aug-93-Christmas 93 + 3.5" disks	£18.00	9185
Atari ST User Binder	£5.95	9478

ATARI ST USER READER OFFERS

Offers subject to availability.

All prices include UK postage, packing and VAT. For orders over £10 please add £5 for Eire/EEC, £10 for overseas unless specified above. Overseas orders despatched by Airmail.

Valid to July 31, 1994

I wish to pay by:

☐ Cheque/Eurocheque made payable to Europress Direct

☐ Access/Mastercard/Eurocard/Barclaycard/Visa/Connect

Expiry Date

Name Signed

Address

Post Code

Daytime telephone number

PRODUCT	ORDER NO.	PRICE
Please add postage as detailed		
<input type="checkbox"/> Please tick if you do not wish to receive promotional material from other companies.		TOTAL £ <input type="text"/>

Send to: Europress Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB (No stamp needed if posted in UK)

Products are normally despatched within 48 hours of receipt but delivery of certain items could take up to 28 days

STU AUG.

Chequebook

Programmed by: Denys Bennett

Available from: Denys Bennett

Chequebook features two interesting packages for the home financier who doesn't trust banks and wants to personally keep tabs on what's moving in and out of his (or her) account. The title is designed to be a speedier alternative to a spreadsheet.

The program handles cheques and deposits, can set up and maintain standing orders or direct debits and allows the user to compare their statement with the bank's.

Other features include the ability to enter different currencies, such as French francs, while retaining the ability to estimate your current account balance in sterling until that final, joyous bill arrives.

Search options allow the user to hunt down that missing tenner for which they can find no explanation, find the cheque that was supposed to have been sent to the taxman 12 months ago, cut an entry from one account and paste it in to another, produce a report of all cash card withdrawals – the list goes on and on.

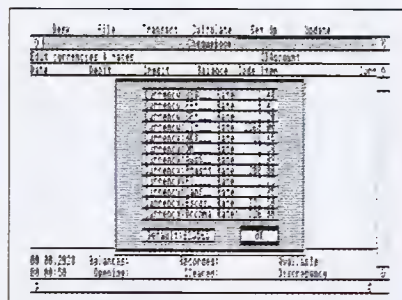
Produced in an easy-to-use system and supplied with well written and self-mocking humourised instructions (one section reads – "Boring Detail" and he's so right), Chequebook is a comprehensive package that beckons you to have a further look.

As a bonus, also included on the value-packed disk is a colour driver for the Hewlett-Packard 550c Colour Ink Jet that can be used in co-operation with 1st Word Plus. This process involves using Hebrew characters as shift characters to turn on ink colours. Why this should be is one of life's great mysteries and one I'm sure some helpful soul out there is begging to answer for me. By using the character tablet and mouse pointer, you are able to enter a particular Hebrew character and, hey presto, you can tell the computer where you want the ink to change colour.

The Hebrew characters don't print, so have no fear of your sheet of text printing out looking more like a prop out of *Raiders Of The Lost Ark* than just a colourful document.

The only downside is the lack of a 'What You See Is What You Get' screen display that's always a useful and highly valued inclusion with any serious text-related package.

The good news for Falcon owners is that Chequebook is fully compatible, so with only a tenner needed to lay your hands on the full version, this is a rich set of programs.



Financial worries and despair are alleviated in Chequebook, a handy utility for keeping track of your cash

PUBLIC SECTOR

Forget the 3DO, Jaguar, PS-X, Mars, Saturn and Project Reality – at least PD is actually available to buy



h joy! Another month passes and yet more and more promises are made by those next-generation companies with their heads in the clouds and their PR company spewing out hollow promises and specification lists the length and breadth of the planet, leaving every consumer in considerable doubt about what to actually buy.

Okay, so PD may not be up to the standards of *Alien Vs Predator* but it makes a refreshing change to have an envelope quietly slipping on to the desk and not a fanfare of hype and empty boxes with a slip of paper reading "sorry, game not available until Autumn, 1995, but could you plug it in your mag anyway with this single screenshot..."

Snacman

Programmed by: Impact Software

Available from: Goodman International
Disk No. GD 2276

Oh, happiness and much mirth, another pacman variant! After Pacman On E's last month, I simply couldn't keep myself away from this veritable pandora's box of originality.

For all of those who have been fortunate enough not to have ever heard of the concept behind this rusty, aching-at-the-joints title, the player takes control of a little yellow head – very much a variant on the acid head found on most rave posters in the mid-80s.

Move this little critter round a maze and eat pills – again and again and again. Snacman, the 2.24 in the afternoon, 15th, of May 1994 special collector's edition, is certainly a very polished conversion, featuring a series of differing mazes and incredibly annoying music – body blows and fluids were nearly exchanged in the office over who had access rights to the volume control.

Speed is just right with ghosts thankfully not programmed to follow you round blindly, copying your every move. One of the most irritating features is the restart if you get killed. No matter how many pills you may have eaten on a particular screen, once touched by a ghost it's back to the beginning of that level to start all over again.

Pacman On E's is the better game simply for variety but, at the end of the millennium when so much has developed in the games concept department, Pacman should surely be put to rest once and for all. It was never that brilliant anyway.

Perhaps, though, we can look forward to Pacman 2000 on the Jaguar. Don't even think about it, Mr Minter.



Pacman – again...

Spacewar 2000

Programmed by: J Chan

Available from: LAPD
Disk No. G 365

Cast your mind back a few months ago and you may well remember an STE specific title called Utopos that featured two-player action in the style of Asteroids and Thrust. Well, here comes Spacewar 2000, a similar offering for all blast addicts out there.

Each player must choose a ship from the shipyard and then enter a single-screen combat zone littered with obstacles such as indestructible asteroids, to try and be the first to blow the other into the abyss-like realms of space. The fight is spread out over ten battles to the death – the accumulator of the most victories is the winner.

Also up for grabs for those who earn the most cash are various weapon power-ups, armour and other special features that are all available from your local, friendly shipyard.

The gameplay is relatively fun and allows up to four players, but the main problem is the way it all moves – even on the STE, the



A two-player Asteroids derivative, Spacewar 2000 is a relatively fun, if crude-moving, game

sprites move jerkily and unconvincingly. Smoothness is vital to any Asteroids variant to help the game flow along.

Despite the rather rough operating system, Spacewar 2000 is a relatively fun game. If you own an STE though, Utopos is a much better buy.

Gapper

Programmed by: Peter Kerr

Available from: Caledonia PDL
Disk No. GM-182

Gapper is an odd game. Clear the screen of tiles by matching pairs of the same "suit" together within a time limit. Ideally, you must do them as close to each other as possible or you'll end up with more being added as the original tiles are taken away.

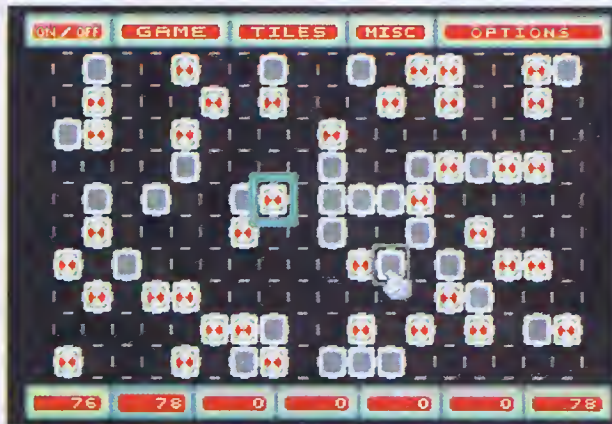
Sounds different? Sounds a little dull? Well, in practice, Gapper is relatively addictive and fun. Everything is changeable. The time limit, the number of tiles that you begin with and, on the full version, different types of tiles may be selected.

Also available is a pseudo three-dimensional view of the action with a grid to help you make sure that there aren't too many gaps between the tiles you wish to match.

The main gripe I have is that much of the gameplay comes down to luck and how far apart the computer puts each potentially matching piece.

With this element of chance, play can sometimes turn a little frustrating as you wipe out the remaining two pieces, only to have another couple appear in their place. Graphics are unfortunately remarkably dull and, if the author decides to go ahead with a sequel, a facelift for the program would be met with this reviewer's open arms. Sound is also sparse and uninteresting – perhaps some other spot effects could have been put somewhere in the proceedings.

Despite these shortcomings, Gappers is different and simple to use, enough to warrant a play on. Just about recommended.



Tiles, tiles and more tiles are the predominant feature in Gappers, a quirky title from Caledonia

OCR

Programmed by: Alexander Clauss

Available from: Goodman International
Disk No. GD 2254

Optical character recognition – a mouthful indeed and with German instructions das boot, it certainly takes a little time to work out what each option does.

The basic function of the utility, for the uninitiated, is for the user to be able to load

in a picture file (in this case IMG) and get the computer to read it.

If any text is present on the fixed image, the program tries to recognise it and turn it from a simple IMG file into ASCII text. This can then be transferred to a word processing package and worked on.

There are several options available from cutting and copying to sizing, and various recognition facilities such as a query rate – should it guess or ask you for your opinion?

It's an interesting and valid package that, if a need can be found for it in your software library, is well worth having.

Adventure Creature

Programmed by: Deano

Available from: The Floppyshop
Disk No. UTL 4142

I love PD. Where else can you find a text adventure creator. Slaving over the keyboard, trying to work out what the hell the right word is to enter in to the computer's arthritic parser (remember those wonderful word engines before Monkey Island came along?).

The STOS-based Adventure Creator is a simple and easy-to-use package to help you make up those scenarios that commercial software houses could never release.

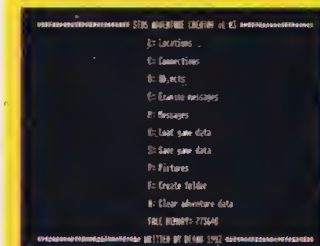
Presented in a series of straightforward menus dictating object and location entries and how they are all connected and interwoven, it's simply a case of typing in the various details and running the end product via the test program.

Documentation is extensive, with the author kindly including a section on the roots of adventuring and the basic concept behind the genre of the keyboard-based variety.

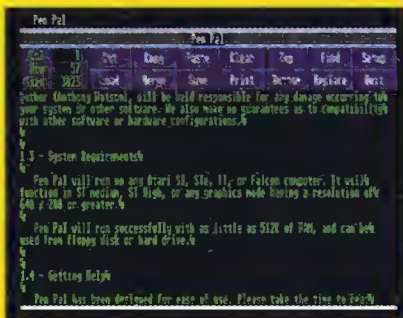
The only real fault is that the parser, even by the standards of the Spectrum in its final couple of years, is extremely unflexible and restricted.

This is illustrated by the sample adventure where you, as a female student, must escape from the school of St Brides without being caught – most of the time is spent trying to work out the right words.

Despite this rather large and cumbersome shortcoming, it's worth having a look at if only for the chance to muck around with the system and amuse yourself and your friends for a few hours on a Sunday afternoon.



Create your own text-based adventures to amuse yourself into the wee hours



Text can be copied, cut and spliced with Pen Pal

Pen Pal/ Recipe Box

Programmed by: Anthony Wilson

Available from: Goodman International
Disk No. GD 2255

Winging their way from the great US of A are a text editor calling itself Pen Pal and Recipe Box, a computerised cookery book. The former is a simple, quirky tool for slapping in a large amount of text and editing, cutting and copying it to your heart's content.

Don't be mistaken – it's not a fully-blown word processor, but for what it purports to be, Pen Pal hits the mark. The user interface, while very basically set out, is attractive and easy to use.

The real jewel on the disk though is the excellent Recipe Box. If you're tired of recipe books, newspaper cuttings, index cards and other avenues of cookery tips and storage, then the versatility and professionalism of Recipe Box is an ideal replacement.

It's one of those packages which shows off the use and practicality of computers and how they can help even in a small way like this. Recipes can be entered and organised into chapters under varying titles and, with the full-blown version, you can have 1,000 chapters with 2,500 recipes in each.

Each of these, in turn, can be amended, deleted or even resized so that if you have to re-calculate a menu for a group of six and not for the usual one or two, a click on the mouse button and the briefest of keyboard entries can bring up the appropriate amounts required.

On top of this, there are menu timetables that can be filled in and printed out and a comprehensive A-Z calorie chart that ranges from four ounces of eels (374) to half a cup of Zucchini (20).

All these variables, options and facilities add up to a serious package that should be part of every chef's menu for success.



An excellent package for keeping all those home-spun recipes on one handy disk

Attention all PD libraries

If you wish to feature in *Atari ST User*, just send any of your titles which you feel worthy of review to: Public Sector, Atari ST User, Europress Publications, Europa House, Adlington Park, Macclesfield SK10 4NP.

Please include a list of the contents of each disk detailing the program name/s and what they are. This ensures quick assessment and inclusion in the magazine. If you are a shareware author, send in your latest creation along with a list of libraries who will be distributing your program/s thereby achieving maximum publicity.

Blox

Programmed by: Dave Baggett

Available from: Goodman International
Disk No. GD2267

According to the README.DOC at the beginning of the game, Blox features stunning, art-deco graphics (not), quick, crisp animation (sort of), vibrant, digitized sound (yeah, right) and so on and so on.

Pushing these wonderfully exaggerated Americanisms aside to look at the actual game reveals a healthy but not nearly as rosy game as the PR blabs about.

The gameplay is a spin off of Tetris. Instead of the usual vertical challenge of the Russian classic, the player is presented with a gaming area where a single tile sits in the centre.

Subsequently, clumps of tiles fall from every direction – horizontally, vertically and diagonally. These may be rotated or moved in any direction other than backwards and must be placed so that rings are created round the central piece.

Colour matching is not important, the computer takes care of that. All you need to worry about is making sure that your revolvable clocks fit in to a solid shape. Once a ring has been formed, the amassed tiles collapse and after five have been formed, you're moved up a level.

For panic situations as the screen fills and you're desperately trying to clear it, hit the spacebar and you can nuke one of the partially completed rings.

The gameplay is certainly challenging and addictive at times, even if the graphics and sound do the title no favours.

If you're expecting this to be a walkover though, think again, Blox is a hard nut to crack. Recommended.



Guide the clumps of tiles to the central piece and create rings to move onto the next stage

Lay your hands on me...

Caledonia PDL
250 Oldtown Road
Hilton
Inverness
IV2 4PT

Denys Bennett
76 Mexfield Road
Puney
London
SW15 2RQ

Makes cheques out for £10 and payable to
Denys Bennett

Emerald City PD
PO Box 28
Southampton
SO9 7HS
0703 672 577

Floppyshop
PO Box 273
Aberdeen
AB9 8SJ
0224 312 756

Goodman International
16 Conrad Close
Meir Hay Estate
Longton
Stoke-On-Trent
ST3 1SW

LAPD
PO Box 2
Heanor
DE75 7YP
0773 605010 or
761944

The art of cross stitching has been around for many hundreds of years, dating right back to seventh Century Egypt. Its appeal has even reached royalty and one of the most famous examples of cross stitching is in fact the wall tapestries created by Mary Queen of Scots.

The idea is to create pictures and patterns by sewing coloured thread onto fabric. The process needs a master pattern to be used as a guide to the sewing and these are normally found in various cross stitching books or magazines and, of course, can be made yourself.

The old-fashioned method of creating these patterns is a long and laborious task. The method involves colouring in squares on graph paper but this obviously has many disadvantages.

For example, duplicating a section of the pattern becomes a time-consuming chore, and even changing a colour takes time and trouble with an eraser.

But thankfully all this is set to change with the aid of this cross stitching package, written by Chris Skellern. It enables you to create your own designs via a mouse and a computer screen. A fairly simple but effective time-saving idea.

PATTERN

By clicking over the desired area on the grid you can plot the stitches in whatever design and colour you want. Make a mistake and simply click over it again with a different colour.

Repeating a pattern is easily achieved by defining the area and then moving it to where you want, enabling it to be rotated, enlarged and reduced, for example.

This package will run on any Atari ST variant with preferably 1Mb of memory (although it does run on 1/2Mb, 1Mb is recommended to create very large patterns) and you will also require a low-res monitor or TV, and a printer that will print graphics.

The program allows for any size of pattern to be defined, up to a maximum of 1280 x 800 stitches (with a fabric that uses a stitch count of ten stitches per inch, this maximum size gives a total fabric size of around 10 x 8 feet).

The package contains many other useful features to make life easier, such as different close-ups of the pattern to enable a very precise design to be created. The pattern can also be reduced

Getting in a knot over your cross stitch? Does the thought of making a tapestry pull the wool over your eyes? Fear not, Tina Hackett unknots her needles with Emerald City's professional cross stitching package, Easy Stitch

Stitched up

to see the entire area, so you can continually see what the overall effect is shaping up to be. While you do this you can save your place in the pattern.

To bring up the main menu click on the right button. This accesses the other main options including the stitch selection menu which contains four back stitches, four half stitches and the normal full cross stitch.

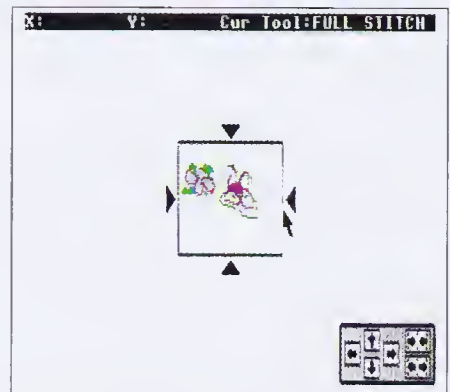
There are two other cross stitching packages on the market but these differ from Easy Stitch as they don't have the ability to plot half and back stitches.

CREATIVE

Colours can be changed through the appropriate colour selector. This allows you to mix and label colours and define symbols which can then be saved to disk.

Easy Stitch is a great package which takes all the hassle out of this enjoyable pastime. It enables you to make patterns easily and allows you to be as creative as your imagination stretches.

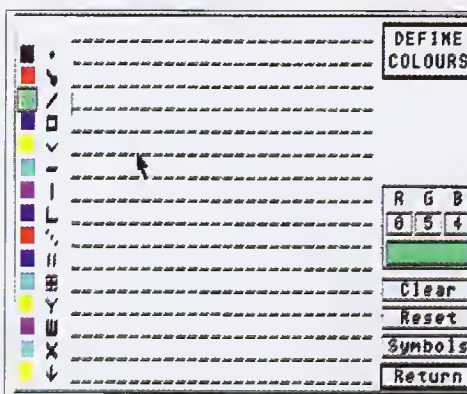
The package is simple to use with a clear option panel and easy-to-understand menus. The close-up views enable some very precise work to be carried



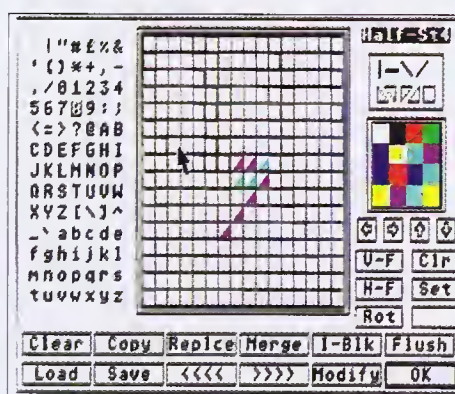
The user-friendly interface makes the whole process extremely easy



View how your overall pattern will look



Re-define colours to your personal tastes



Zoomed-in view allows you to create precise patterns

BOTTOM LINE

FEATURES

Many features available make creating a pattern easy

Excellent
Good
Average
Bad
Appalling

EASE OF USE

A clear icon system and user-friendly interface

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Takes all the hassle out of pattern making - for a very reasonable price

Excellent
Good
Average
Bad
Appalling

Product: Easy Stitch

Supplier: Emerald City, PO BOX 28, Southampton, SO18 4AA

Telephone: 0703 672577

Price: £16.95

Configuration: Atari ST/STE/TT or Falcon with 1/2Mb (1Mb recommended) with low-res monitor or TV and printer (Daisy Wheel printers not suitable)

Galactic may not be a household name in the UK, but they're one of the oldest ST companies in Germany. It all began when the two current owners, Frank Dürnenburg and Frank Stachowiak, met at a company where, as students, they were getting their compulsory practical work experience.

Together with a third member, who is no longer with Galactic, their task was to do a feasibility study of "travelling salesman" software.

This is one of the classic computer problems, where a route must be found for an individual to visit several locations in the most economical and the least time-consuming fashion.

Their department head entrusted them with the task because, as he put it, they knew more about computers than he did.

LATERAL THINKING

The result of the study was that none of the available software which sold for upwards of £40,000 was up to scratch. The biggest problem was data acquisition which on the mainframe and PC platforms required a long term investment. Instead, the team developed a much better solution on an Atari 800.

Using lateral thinking, they approached the problem from the physics side instead of that of a salesman. The result was that the PC version needed all night for a 24 location solution while Atari 800 software took only five minutes for an 80 location problem.

The company in question couldn't believe such results were possible and undertook a six-month trial period running all three systems – mainframe, PC and Atari 800 – in parallel using the same data set.

In the end, thanks to its unorthodox algorithm, Atari won hands down but instead of adopting the system, the company abandoned the whole project because they couldn't bring themselves

to believe the results. This same narrow minded PC-orientated mindset has always been the bane of non-PC platforms because businessmen simply refuse to believe their eyes.

The company did make an offer, but the Galactic team did not consider it serious. They also suffered another

setback when the third member of the team suddenly decided to quit.

As a replacement they got a computer science student and Galactic was officially founded in 1986. The name was chosen because Frank D. was a student of astrophysics and had all sorts of star charts around his place. The names like "soft-something" or "hard-something" – quite popular at the time – did not appeal. Actually, the spiral galaxy logo came first and the original choice was Andromeda, but there was already a firm with that name, so they settled for Galactic.

MORE SPEED

This interest in astronomy extended to computers, and the team designed a control system for telescopes based on the Atari 800. However, the start-up costs for such a project were prohibitive.

In 1986, the team also migrated to the ST because of its promise of more speed. The result was the first "plug and play" memory expansion for the machine, which was introduced in 1987.

Solutions from other companies involved soldering, but Galactic's expansion only needed to be plugged in. Galactic also learned a few valuable lessons with the RAM expansion. It's not enough for a product to be technically superior, but it



Galactic offices flying the Atari flag

Out of

Don Maple tells the remarkable story of Galactic, from their innovative hardware roots to their current lateral thinking in difficult times for ST developers

Frank Dürnenburg

Frank D. got interested in computers when the Pet appeared on the scene. "I hung around department stores playing around and programming them," he said.

The first computer he actually owned, in the late seventies, was a TRS-80. It was not an auspicious beginning, because it suffered from all sorts of problems so Frank returned it after only a couple of weeks and got into Basic programming on a Sharp pocket computer.

This was then followed by an Atari 800, originally with 16k of RAM. However, this was not enough, so he soon upgraded to 32 and then 48k.

Frank took to programming in assembler and found it quite interesting playing with display list interrupts and the like. With the advent of the ST he upgraded and focused on the new machine. He's also a great strategy games fan and, as he puts it, "I wasted two years of my life on programming the ultimate ST outer space strategy game".

A quick and very impressive demo followed. This celestial side-project was called Star Net. It was never finished but even today it looks fantastic, managing 60,000 highly complex spaceships simultaneously. The detail is amazing, showing Frank's technical knowledge.

As an astronomy fan, he included real star charts and actual distances. The ships movement even takes gravitational forces into account.



Frank Stachowiak

In response to a question about his first computer, Frank S. replied, tongue firmly in cheek, "Mark I". It turns out that was a chess computer, but his first programmable one was a Commodore pocket model.

Thanks to a very enthusiastic teacher who used to bring his own Commodore Pet to school, Frank got a peek at the real thing. He eventually got a Commodore 64, passing up the VIC-20 which just didn't have enough memory. "I had a computer but no software for it," he said.

He then got into learning 6502 assembly, but all in theory because he didn't actually have an assembler. One of the main reasons for buying the C64 was the promise of the Fortran language for it – which never materi-

alised. In the end Frank switched to the Atari 800 which he found much easier to program because of the available languages and powerful graphic commands. He then naturally progressed to the ST.

It was one of the first Atari 520s, still without ROMs. So after loading the disk-based OS and the original ST Basic, he was left with only 10k of available memory. Frank remedied this by soldering on another half a megabyte himself.



this world

must be easy to mass produce. This played an important part in subsequent designs.

Another lesson they learned was in marketing. The RAM prices at the time were very low so the expansion was offered at a very attractive price. In the meantime, RAM prices rocketed five-fold so Galactic were left with a product costing more to produce than its list price.

All this was reflected in another product developed at the same time. MOD 1 and later MOD 2 and MOD 3 were first RF modulators for the ST as other "plug and play" solutions. They also had video player and external sound output. MOD 3 was the first all-in-one modulator that came together with a built-in monitor switch box.

With MOD 3 the business really took off, and Galactic started working on many products including contract jobs for other companies. One such product was the robot arm interface. This let people connect a popular robot arm to the ST and then control it with software. The business was still run from home which, according to both Franks, turned their houses into "real chaos".

As the business took off and the firm became well known, many individual programmers started offering their products for distribution. This included the Deep Thought chess program released in 1987. It had an opening library which could be edited and expanded. Another

program at that time was Mars, a core war-type program which proved quite successful. The program is a simulated computer where players can program artificial viruses to fight each other.

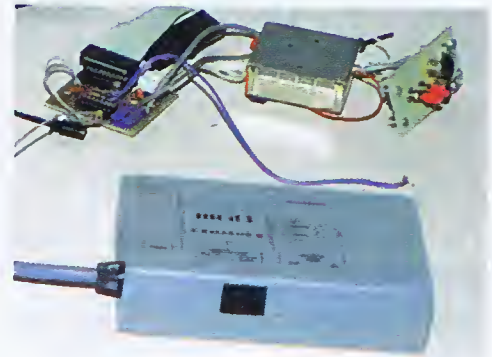
In those pre-DTP – or more accurately pre-Calamus – days, cover design was still quite hard to accomplish and the team were learning design as they went along. They also started specialising, with Frank D concentrating on software



while Frank S was tackling the hardware and low-level programming.

U2 – no, not the rock group but an automatic monitor switch – was the second best-seller for Galactic. It enabled people to connect two monitors to an ST and then switch between them with software which also performed the required resolution change. This was

MOD 3, monitor adapter and RF modulator



handy when, for example, users would develop something on a mono monitor but wanted to see how the finished result looked in colour. U2 made the switching between them quite painless.

In 1988 the firm got into sound with the introduction of their sampler. Named after the Volkswagen car, it was called Volks-sampler. It was the cheapest one around and very successful, being followed by Volks-sampler+ and Midi Kit software. The latter was the first program capable of polyphonic sample replay in conjunction with a Midi keyboard. It also contained a 4-track sample sequencer.

The sound area became quite important for Galactic, and the next series of samplers was released under the name Sampler Star and then later as Sample Star+ and finally Sample Star Midi. These samplers went as far as it was possible with 8-bit sound and are still available.

DISTRIBUTOR

The offers from independent developers looking for distribution continued to roll in at a rate of about 20 per month. As a result Galactic released a number of programs in 1988. Among them were the Retrieve database, ConnectiCad electronics design package and Top Secret, the first real-time data encryption program for the ST.

In the sound and graphics area there was Soundman, a program to enter and play back music, and the Star Designer painting package. The latter was



very successful and had over 600 functions.

Also released during this time was the Fforth language comprising a complete development environment.

Galactic were not only acting as a distributor for all these programs but they actively worked with the authors. Usually, the program on offer was not up to scratch, so additional work was required before its release.

In the meantime Galactic also developed their own new programs inhouse. The first to be released was the original MusicMon ST in 1990 which used to come with a hardware add-on to get a stereo signal out of the ST. Recently it was updated for the Falcon and released as MusicMon 2.

Another program developed completely by Galactic at the same time was Digit. Since then Galactic have been focusing solely on their own developments and out of the original three owners only two remain.

However, Galactic did not abandon their hardware roots and 1990 saw the release of the original Perfect Keys keyboard interface.

This was the first fully compatible replacement keyboard

system for the ST which, most importantly, did not need additional software drivers.

Initially, it was conceived as a built-in upgrade for standard AT keyboards, but soon developed into an external interface as well.

Although the original idea came from outside of the company Galactic eventually took over Perfect Keys and re-developed everything from scratch.

The first problem was in obtaining the original Atari keyboard processor, for this chip was not only difficult to get but also quite expensive.

EFFICIENT

One option under consideration was to salvage the processor from the keyboard being replaced. However, in the meantime Atari started soldering the chips straight to the keyboard instead of using sockets.

The decision was therefore made in 1991 to use a totally different processor and reprogram the keyboard system completely. The ST keyboard is an independent subsystem that communicates with the computer.

The reprogrammed system was quite efficient so there was room left over in the processor for more code. Frank S used this to add features not available in

the original keyboard such as Microsoft mouse support. Today Galactic are continuing all developments inhouse, with the Digit series of programs heading the list.

Initially, all of their products, including translated manuals in English, were only available directly from Germany. However, recently Galactic decided to appoint CGS Computerbild as their UK distributor.

In addition, all programs are now multilingual with the English language manual available simultaneously with the German one. One thing which makes Galactic different is their lateral thinking, plus a happy knack for coming up with innovative solutions.

This is a big advantage in any market, and particularly so in the Atari world which values innovation and forward thinking much more than other, somewhat staid, traditional platforms.

Galactic also echo sentiments expressed by other German Atari companies that in these difficult times they all need to stick together and co-operate more without losing the competitive touch.

This establishes standards and focuses the development effort as Galactic are doing with their Digit Studio series of programs.

Digit II Midi sneak preview

Currently under development, this new program draws on the original Digit as well as MusicMon and Sample Star. It also adds a number of new features tailored specifically for musicians. The new Digit is completely multilingual and will be available simultaneously in German and English. The program has a built-in help system which is invoked with the right mouse button. The playlist can now be triggered through Midi and a full Midi editor is included.

The new Digit also has a very powerful digital synthesiser. A waveform can be cut out of the sampler and imported into the synthesiser to form the basis of a new sound.

A DSP module has a number of effects including a programmable delay function which can be set to emulate the acoustics of almost any room. Actually, the whole DSP effect system is programmable. A sequencer-like system enables you to have effects kick in and out automatically on any track and at any time.

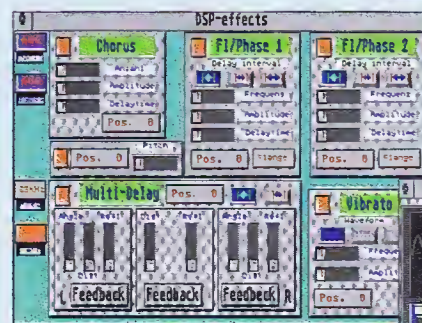
The whole Digit series is based on Digit II Studio, which will form the basis of all future releases. The program has also gone modular but with a difference. Instead of loadable modules they will be compiled straight into the program. This makes it possible to create highly customised versions so customers buy only the modules they need.

Digit II Midi, as explained above, is fine tuned for the musician and includes relevant modules. Finally, Digit II AV which, is scheduled for release in the autumn, will contain the AV module customised for audio/video presentation. For example, whenever the commentary track comes on the background music track will be automatically attenuated.

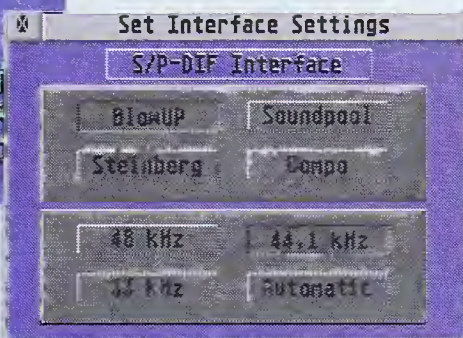


Main desktop showing available modules as icons

DSP module for real time effects



SPDIF, external digital interface config dialog



Full blown digital synth



New Age PDL £1.75 EACH

Unless otherwise stated

All disks require a COLOUR system unless: 'H' - High resolution monitor required, 'A' - Any setup suitable.

FALCON 030 - ALL HD DISKS

- FALC 2 - Falcon Boot 1.2, Backward 2.24 (ST emulator), New Depack, Text Files, Desk Copy, Desktop 1.05, Sysinfo, DC Xtra 2.1, Revive, SpiritED 1.3 (utils).
- FALC 9 - Grotesque (Excellent), Gourd, Speeder, Plasma 30 & 50, Intel + more! (demos).
- FALC 31 - Temptation! The first disk of an EXCLUSIVE pack of JEPG pictures of gorgeous girls. Excellent quality pictures and the three disk pack contains no less than ninety pictures! Yes 90! Disks 2 & 3 on FALC 32 & 33.
- FALC 35 - Nethack 3.1.1 - 2 Meg memory+. Brilliant dungeons and dragons game.
- FALC 36 - RDE 3.1, Toswin 1.4, Iha 2.22, Zoo 2.1, Zip 2.3, Gem Bench 3.25, Good Backup 1.13, Boot Init 1.1, Ecapy 1.5, Fcontrol, Shufit 1.3 (utils).
- FALC 37 - Fractal Playtime, Gemview, Delpaint, Gix Gif, Rinaris 2.0 + more! (art).
- FALC 52 - System Audio Manager 1.1 - assign samples to events, Digilope 2 demo (music).
- FALC 57 - Emocs 3.11, Everest 1.5, KM Term, Atomik 3.5, X-Menu 1.3, Profile 1.43, Rezooler (run RGB stuff on VGA monitor), Fullres 1.01, Swabs, Dload 1.0, Fuzzy Clock 1.14.
- FALC 96 - When Dreams Become Reality (RGB), Warum (RGB), Innovent (RGB) (demos).
- FALC 103 - Oxyd (excellent), Des Losers of Des Hommes (3D shoot em up), Masters of Chaos (Dungeon Master clone), Iron, Lihar Editor, Mario Kart demo. (games).
- FALC 106 - Falcon Flight Demo - real time zooming demo over fractal landscape + great music.
- FALC 107 - Crime by the DNT crew, Wagon by Alphadot, Bobs-1. All RGB/TV only. (demos).
- FALC 109 - DMB icons - two large sets of replacement icons, Before Dawn screensaver 1.25.
- FALC 110 - Vidal - easy to use VGA viewer, Rainbow demo 0.5 - Truecolour art package.
- FALC 112 - Mahjong II - German version of this classic tile game. Disk approx 1/2 full.
- FALC 113 - Margo demo (4meg+) - digitised pictures of a woman modelling a skimpy bikini!
- FALC 114 - Multi-Dialogue 1.3, Master browse 3.2 - excellent text file viewer, T-Cache 6.0.
- FALC 115 - Octalyser 0.8 - another 8-track tracker ported from the STE + docs & source code.
- FALC 116 - Papa was a Blade Runner (4meg+) demo by EKO, very good. RGB/TV only.
- FALC 117 - POV Raytracer 2 on 2 disks, zippped & expanded to nearly 5 meg! RGB/TV only.
- FALC 119 - Moving Pixels Demo (VGA) - 4 meg+ - a mega-massive demo that requires 10 megabytes of hard drive space! From Australia, this basically shows off the Falcon itself - the sort of thing you'd see in shop window, covering graphics, sound and productivity. Very good. Five disks - £28.00!

GAMES

MEGA-GAMES PACK ONE!

No less than ten disks crammed to the brim with archived games (de-archiver and printed instructions supplied) to squeeze on an amazing 117 games covering board/puzzle/action/adventure. For a full list of games with your order or if not ordering, send a stamp. All should run on a colour system with 512k and be STE compatible! You will need about twenty disks to unarchive these disks onto! ASKING VALUE FOR MONEY!

117 GAMES - JUST £14.95!

- GAME 168 - Napoleon - a 'Risk'-style game of war and strategy. 'H'.
- GAME 185 - Oxyd 2 - the sequel to the brilliant Oxyd, much harder than the original. 'H'.
- GAME 186 - Tetrix - new Tetris type game. 'H'.
- GAME 11 - A Question of Snooker, Pinball, Devestator, Roll a Nudge, Ranger.
- GAME 78 - Popeyed - a pop music game with an odd theme.
- GAME 83 - Grandad & the Holy Vest - superb animated adventure. 1 Meg+.
- GAME 104 - Blot! - A very nice version of Tetris. STE only.
- GAME 117 - Fast Freddy - lovely platform game with superb graphics.
- GAME 131 - Glass Buttock of Thang - save the land from the evil buttock! - 1 Meg+.
- GAME 132 - Psycho Pig - two disk platform game, very cute. £3.50.
- GAME 139 - Grandad II - the sequel to Game 83, comes on 2 disks 1 Meg+ £3.50.
- GAME 148 - Operation Blue Sunrise 3 - massive STAC adventure game. 1 Meg+.
- GAME 150 - Course Angler 1.02 - go tackle fishing on your ST!
- GAME 151 - Sim Pig! - a brilliant pig farm simulation! Like Sim City & Sim Earth.
- GAME 157 - 817 - bomb the buildings, F16 - very good flight game, 8 missions.
- GAME 178 - Argon, Out, Codename Bomb, Pyramind, Disk Hunt, Sirtet, Turbo, War Jeep, Plumber, Picker, Planet Man, Uboat, Ipsilon - 13 games!
- GAME 179 - Asteroid, Bang 3, Battle, Bellum, Quiz, Blaster, Chunks, Europe, Explode, Fuzzball, Gems, Invaders, Megaroids, Micra, Octapod, Ohello, Pac Man, Plant, Rockfall, Tanx, Tennis, Wall Street, Zappy.
- GAME 180 - Mystic Well, Deep Lair, Football, Harris Goes Fishing, Haunted House, Invaders, Jumper, Room, Slaveage Delive, USA, Zym, Skins.
- GAME 181 - Utopas 1.5 - very slick STE only Olds/Grav type game, Endurance - 3D game.
- GAME 183 - Towers - a great new Dungeon Master Clone - the best yet! 2 disks (1Mb+) £3.50.
- GAME 187 - Karate Champion, Hector and the Mutant Vampire Tomatoes - nice platform.
- GAME 188 - Premier Mahjong II - excellent version of this superb tile game. 60K+ only.
- GAME 189 - Cud Lee's Quest - platform game for kids, Mindwell - roleplaying fantasy game.
- GAME 190 - Quest for Knowledge - quiz type game set in a maze arena.
- GAME 191 - Walls of Illusion - yet another Dungeon Master Clone, good one though. 1 Meg+.
- GAME 193 - World Fighting Championships - beat up opponents from all over the world.
- GAME 198 - Roll-It - ingenious puzzle game with 40 levels, a sort of ball/tile game. 1 meg+.
- GAME 199 - Skills - A hash STE only version of Minesweeper from the PC, good. 1 meg+.
- GAME 201 - It's A Mug's Game - good overhead view boxing game with nice graphics etc.
- GAME 204 - Gone to the Dogs - bet on the races! Grav - good arcade game based on Olds.
- GAME 209 - Money Mania - collect all the money from each screen, loads of nasties etc. Good.
- GAME 210 - Ruthless, shoot em up, Spherical - good platform game, Serendipity - good puzzler.

BUDGIE GAMES - £2.75 EACH

- BUGAM 89 - Horse Racing Simulator for 1 to 5 players. Buy/sell and bet!
- BUGAM 104 - Jetpack - another faithful clone of a classic Spacey game.
- BUGAM 113 - Football Tactician - formerly a £20 release! Excellent!
- BUGAM 121 - Super Scramble - take a trip to the 8-bit days with this shoot 'em up.

DEMOS

- DEMO 356 - Kuba Club Culture Mix Pack 1.0 - 6 great bits of club music.
- DEMO 355 - The Brace Demo - nice auto-running multi-part from Diamond Design.
- DEMO 351 - The Edge of Panic Demo - a good STE only demo by ACCS.
- DEMO 350 - Exhaust demo - another good STE only demo by ACCS, 1 meg EXACTLY!
- DEMO 342 - Sid James Demo - clips from the films - STE only 1 meg+, 2 disks £3.50.
- DEMO 335 - Reality is a Lie - a 13 screen demo by Psychomix, very good. 1 meg+.
- DEMO 333 - Cemetery demo - a good digi-music demo.
- DEMO 330 - Beginning of the Ending - this demo actually plays in the background of a game of breakout which is played with S balls! Shows your concentration.

ART & GRAPHICS

- ART 1 - A disk full of 23 miscellaneous utilities including viewgif 1.2.
- ART 51 - Crackart 1.36 - latest version of the best ST art package! 1 Meg+.
- ART 128 - Gemview - new version of this superb viewer/converter.
- ART 157 - PAD 2.4 - English version of this high res drawing package. 1 Meg+.
- ART 172 - Paintshop Plus 2.03 - A commercial quality drawing package.
- ART 187-196 - Temptation! Volume 1 - the first pack in a whole new range of top quality pictures of tempting girls! Two versions (please state which) - one for STE and one for STE which takes advantage of a 32,768 colour palette! EXCLUSIVE to New Age PDL Ten crammed disks at just £15.00!
- ART 209 - Erotic Dreams slideshow - all pictures of Supermodel Cindy Crawford.
- ART 212/213 - POV Raytracer, the best raytracer around! 2 disks. £3.50.

SOUNDTRACKER MUSIC

- TRAC 129 - Four, Progfunk, Cult 2, Cult 3, Federal Force, Rave 1.
- TRAC 128 - Con, Short, House, Jewel, Spassoon, Celtic, Rappit, A-Team, Sweet Dreams.
- TRAC 127 - More Learnings, Backpocket, Psychic 1, Bushfire, Donna 2, Ace Base, Echoing.
- TRAC 126 - Scrambled Mind, 1+ World, Wyre II, Hope Part 2, Lotus Turbo 2, H-Metal.
- TRAC 125 - The Loader Final, Artificial, Windy 1 Play, Space Journey, SIII.

WORDPROCESSING & DTP

- WORD 1 - ST Writer Elite, EDI Text, Zap ST, ST Page, Typist, Desk Accessories. 'A'.
- WORD 4 - First Word + tools, Grammar checker demo, Spell Binder, Text Filter. 'A'.
- WORD 5 - Calamus Demo, no save function but you can print. 'H'.
- WORD 8 - D8 Writer 1.4 - very slick wordprocessor with many features. 'H' 1 Meg+.
- WORD 9 - Calamus Support disk - loads of utilities for Calamus and fonts etc. 'H'.
- WORD 12 - Poppyrus Demo 2.26 - good document processor with fonts etc. 'H'.
- WORD 13 - Calamus S demo - fully functioning except save. 2 disks. £3.50. 'H' 1 Meg+.

BUSINESS

- BUSI 2 - Sheet 2.0, Dbase One, First Base 1.6, Home Budget Template. 'A'.
- BUSI 4 - Opus 2.2 - brilliant spreadsheet. 1 Meg+.
- BUSI 6 - Double Sentry Book Keeping System, Address Book. 'A'.
- BUSI 7 - Astubank 1.1a1 - complete home accounts system - colour only.
- BUSI 11 - Compact Office Management Program 2.05 - far businesses, tons of features. 'A'.
- BUSI 12 - Inventory PRO - keep track of stock levels, GP Patient Care for GPs. 'H'.
- BUSI 14 - Data Techniques 1.41 - easy to use but powerful new shareware database system. 'A'.

FREE ST CATALOGUE WITH FREE SOFTWARE FOR NEW CUSTOMERS UPON REQUEST

UTILITIES & APPLICATIONS

- UTIL 2 - Startem, Head Start 1.1, DC Clock, Disk Checker, Hard Disk Utils, Ram Disks, Hack 'n' Copy, Turtle 3.2 (HD backup), Megafomat, Memory Test. 'A'.
- UTIL 4 - Pools 2.5, ST init 3.4, Switcher - loads programs faster, 20 DC utilities. 'A'.
- UTIL 5 - F-Copy 3, DC Showit, Desk Manager, Disk Scan, Mono Emulator S, Spool, DC Stuffer (loads 32 accs), Speech Synthesiser, Mouse Accelerator. 'A'.
- UTIL 6 - James The Butler, London Phone Cards, MenuSYS, Pinhead, Super Calendar Batch Stampup, Auto Sort, Postmaster, No Bombs, E-Disk, 9 Quick Utilities. 'A'.
- UTIL 12 - Jam Packer 4, WindX (Modulator control panel), Satellite 4.01, Clock Set. 'A'.
- UTIL 13 - German to English translator, fast Print, DC Salvage, MINT, Maccol 3.0. 'A'.
- UTIL 14 - Printer Drivers inc Canon Bubblejet, Gume Daisywheel, Brother + Epson. 'A'.
- UTIL 16 - Chameleon - loads and unloads accessories without having to reboot, Sticker 3.0 (H!), Delphine File Selector, Super Virus Killer, Benchmark. 'A'.
- UTIL 19 - Your Second Manual, Jokes, GDOS info, Bombs info + several magazines. 'A'.
- UTIL 30 - Superboot 8.1, Build Your Own Scanner, Report Writer, Disk Cleaner. 'A'.
- UTIL 35 - Cheertab 1.1 (high speed copying util), Rainbow TOS patches, Unrar 2.2. 'A'.
- UTIL 38 - Printer Drivers inc: KXP 1124, Star LC24, NEC Pinwriter, Brother, Canon, Citizen, HP Deskjet, Oki, Gume, Taron, Toshiba, Ritemon, Atari. 'A'.
- UTIL 40 - Loads of packers inc: Atomik 3.5, Automation 5, Dragon 3, Fire 2, Ice 2.4, Pompey 1.9, Speed Packer 2, Branch Always Packer, Multi Depacker 1.5. 'A'.
- UTIL 42 - Intro Maker - mix pictures, sprites, scrolls and music together. Colour only.
- UTIL 45 - Kaos Desk 2.01, Terra Desktop 1.36 - replacement desktops. 'A'.
- UTIL 46 - STOS Shoot em up builder kit 0.6 - colour only.
- UTIL 53 - TOS Version 1.0 - allows you to run programs that don't run on your TOS. 'A'.
- UTIL 54 - Message Scroller, Archiver Shell, Envelope Printer Demo, Mega Cracker. 'A'.
- UTIL 57 - Revenge Disk Displayer 3.0, Wordfinder 3.0, Desktop.inf configurator. 'A'.
- UTIL 58 - Career Themes Inventory and Personality Tester - great fun!
- UTIL 59 - Needset patches - upgrades 3.01 to 3.02 and 3.02 to 3.03. 'A'.
- UTIL 60 - JC Label 1.3, Jon-Dos 1.7, Flowchart Compiler, Boot Time 2.0, Multisync. 'A'.
- UTIL 62 - Bi Chrome 1.1, Desk Master, Grocery Lister, Silk Mouse, Auto Load, Blitz. 'A'.
- UTIL 66 - Nation X utility disk - over 150 programs! Everything you need to get you started! Includes disk utils, diary, virus killer, packers etc. - highly recommended! 'A'.
- UTIL 67 - CAD CAD 2.2 - design cards, posters etc. Document files on UTIL 68. 'H'.
- UTIL 70 - Route Finder 1.8 - Like Autoroute - plans journeys for you, SpiritED 1.3, Die Uhr. 'A'.
- UTIL 74 - Award maker - easy to use program to create certificates with nice fonts, borders.
- UTIL 75 - Idealist 3.4 - file printer that saves up to 80% of paper used! 2 disks £3.50. 'A'.
- UTIL 77 - Before Down 1.25 - latest and biggest version of this screen saver. 2 disks £3.50.
- UTIL 79 - Spectrum Games - a disk full of games to go with the emulator on UTIL 55. 'A'.
- UTIL 80 - Terradisk 1.38 (latest), X-let 097, Curtains - protect your ST from snoopers. 'A'.
- UTIL 82 - Beropress 2.6 - create posters, banners, gift cards, letters etc. 'H'.
- UTIL 83 - Spectrum Emulator 2.07 - latest version - 2 disks + example progs. 1 meg+. £3.50.

MUSIC & MIDI

- MUSIC 1 - Noisetracker 1.5 - a popular soundtracker creator with samples & source.
- MUSIC 11 - Arpeggiator, Zeppelin, MIDI Beat, Project, Jubeebox, MKS-50. 'A'.
- MUSIC 12 - Henry Cash Sequencer, Composer. 'A'.
- MUSIC 16 - Yamaha PS5790 Editor, includes loads of sample voices.
- MUSIC 22 - Alchemis Junior 2.2 - sequencer with real-time, multitasking etc. 'H'.
- MUSIC 23 - Sound Merlin - good ex-commercial program, Mozart's Dice Waltz - compose music without musical knowledge. 'H'.
- MUSIC 24 - Octalyser 8-track tracker - STE only, Protracker 2.1, YM Tracker.
- MUSIC 26 - PSS Utilities disk, loads of programs including patch editor, librarian etc. 'A'.
- MUSIC 27 - Cassi C2 sounds, 32-track sequencer, Kawai K1 editor, MIDI menu. 'A'.
- MUSIC 29 - Kawai K1 synth sounds. 'A'.
- MUSIC 31 - SOX 1.0, MIDI Mover, TX81z Editor, Real Drumming. 'A'.
- MUSIC 32 - Tr-Sound Sequencer (Not STE), Disc Play 2.45, In control.
- MUSIC 34 - SOS 64, Guitar Professional, Uniplay, Play Em 1.0, YM2149 Editor. 'A'.
- MUSIC 35 - Roland 'D' Series Sound Banks for DS, D10, D20, D110 and GR synths. 'A'.
- MUSIC 36 - Final Score 2.0 - score writing system. 'H', EKSEQ 1 - 100 track sequencer. 'A'.
- MUSIC 38 - 790 Dump, ST Sound 2 - record, play, compress and edit samples.
- MUSIC 39 - SSP PD Voicepack - patches for the Roland GM70, TX81z, Roland D110.

EDUCATION

- EDUC 1 - Kid Music, Kid Notes, Kid Piano, Kid Puzzle, Kid Graph, Rebus Writer.
- EDUC 7 - Michael's Big Adventure - colourful graphics, easy to play. Age 8+.
- EDUC 9 - Bodyskop, Computer School 2 & 3, Butterfly in the Park.
- EDUC 21 - G.C.S.E. Higher Maths Grade Tutor, Français 3 - French Tutor.
- EDUC 22 - G.C.S.E. Chemistry Tutor - all you need to attain grade 'C' or above.
- EDUC 23-26 - CIA World Factbook - four disks crammed with information on hundreds of countries + weights & measures and a complete chemistry reference book! £6.50.
- EDUC 39 - Mini Magic Storybook - cut down version of the successful commercial packages.
- EDUC 43 - Professor Clever 2 - teaches kids aged 5-11 about numbers, spelling and time.

PROGRAMMING

- LANG 1/2 - Sazobon C Compiler release 2. Includes documentation, shell etc. £3.50.
- LANG 5-9 - GNU C++ Kit - Hard Drive + 2.5meg required, not for novices! 5 disks £8.00.
- LANG 13 - Professional GEM guide - 17 chapters of tutorial with C source.
- LANG 16 - STOS tutorial and various basic programs.
- LANG 27 - GFA Basic v.2.0 - GFA Expert - a nice GFA Basic tutorial.
- LANG 29 - STOS Tracker - adds a new set of STOS commands for Soundtracker.
- LANG 36 - STOS Extensions: Missing Link, Misty, Blither, MIDI, STE, + 7 more!
- LANG 37 - STOS Software pack 1 - millions (almost!) of routines etc.
- LANG 41/42 - STOS 3D - brilliant extension allowing you to program in 3D. 2 disks £3.50.
- LANG 43 - A disk crammed to the brim with STOS ACBs.
- LANG 44 - STOS Adventure Creator 1.03 - write your own graphic adventures. 'C'.
- LANG 45 - Head 'n' Serve Sazobon C - a very easy to install version of this compiler. 'A'.
- LANG 48 - STOS Extra Extension 1.91a - adds about 52 new commands to STOS. 'A'.
- STOS 15 - The latest issue of STOSSER disk magazine, tutorials, articles, reviews etc.
- BUKRO 2 - 68000 Programmers Library - hundreds of routines for games. £2.95.
- BUKRO 4 - Moving Bytes 1 - more routines for screen effects, music, scrolls. £2.95.
- BUKRO 16 - ST-68K Reference 3 - includes full data on ST internals, excellent. £2.95.

THE ST HANDBOOK - £2.50

A brilliant new magazine dedicated to PD and Shareware with stories, articles, news, reviews, competitions, charts and lots more! Issue three is now out and this issue comes with a free cover disk full of games and utilities. New Age PDL are official stockists of the ST Handbook - order your copy now! A bargain at just £2.50. Please state which issue.

ACCESSORIES & COMMERCIAL ALL ITEMS UK ONLY

- Easy Text Professional DTP (1 Meg+) £35.95
- Easy Text Professional Vector DTP (2 Meg+ & HD & Speedo GDOS) £36.95
- Introducing Atari ST Machine code - book & disk £17.95
- Beginners' Guide to STOS Basic - 618 page ringbound manual £32.95
- IMPrint, for quality mono printouts on 9 or 24 pin printers £9.95
- IMPrint, same as above but for colour printers £13.95
- Degos Art v2.0 - computer art tutor on 2 disks £9.45
- Calamus 1.09 - mono 1 meg+ £79.95
- Mr. Smart's 8IG Time - 25 commercial educational programs £24.95
- Family Roots - Genealogy Program £23.95
- ST/STE Mouse £12.50
- Quickshot Joystick £6.95
- Mouse/Joystick Extension leads £4.95
- 10 Capacity disk box (only with order of one or more disks) £0.95
- 100 Capacity Disk Box £7.95
- 200 Capacity Disk Box £9.95
- 3.5 inch Drive head cleaner £3.45
- ST or Falcon dust cover £3.45
- Keyboard Cleaner - pack of ten wipes £3.45
- Copyholders (attach to monitor to save desk space) £2.95
- Mouse house £2.95
- Mouse mat £2.95
- Mouse cleaning kit - 10 cleaning sticks and cleaner tissues + fluid £4.95
- 10 High quality blank disks £4.45
- 50 High quality blank disks £19.95
- 100 High quality blank disks with 100 cap disk box £41.95

For full details on any of these products just give us a call!

ORDERING DETAILS:

All orders MUST be accompanied by payment. In the UK send a cheque or uncrossed postal order made out to 'New Age PDL'. Elsewhere any form of payment in sterling except for credit cards. Postage for PD disks as follows: UK is FREE! Europe 15p per disk, elsewhere 50p per disk. There is no minimum order.

NEW AGE PDL (DEPT STU21), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD TEL: (0702) 480691

Why bother?

The concept behind voice mail is similar to Email. Email is a way of sending computer files containing written messages via the telephone line. Voice mail is the same only instead of text the transferred information is the actual sound. This sound is digitised and stored on the computer as files. Playing it back involves converting the computer file back into analogue sound.

The natural question at this point is: Why bother? There are cheap analogue answering machines out there so why tie up a computer and choke your hard disk with large files containing digitised sound?

The answer is very simple: Flexibility! Once vocals have been digitised, the whole concept of an answering machine takes a quantum leap. You're no longer limited by the Spartan features of an answering machine as you enter the world of digital control. In practical terms this means your responses can be tailored to particular people, you can have different outgoing messages for different times of day or day of the week, you can have the computer forward your mail by making a call all by itself... the possibilities are mind blowing.



Mic and speaker "thru ports" enable you to connect other devices whilst the T'Phone hardware is connected

Anybody who has ever seen the Falcon in action knows that it's a very serious multimedia machine capable of wonderful graphics and sound.

And since one of the many promises of multimedia is to marry the telephone and the computer, that's exactly what Compo have done with their latest hardware and accompanying software: T'Phone and VoiceMail.

The interface is a small black box with four tentacle-like cables, four sockets and an off-hook LED indicator. The box has its own power supply, but there is no on/off switch.

INTERFACE

Two of the cables connect to the Falcon's mic and speaker connectors. This means you'll have to disconnect what you have there and reconnect them to the "through" sockets on the interface itself. An ideal solution is one of those microphone/headphone headsets because it will enable you to make phone calls leaving your hands free.

The last cable connects to the Falcon's modem port. There is no "through" modem socket on the interface so you'll have to switch between the two. To save on wear and tear, you're better off with one of those A/B boxes where you can plug in both modem and interface, choosing between them with a flick of the switch.

Finally there are two Western-style telephone sockets, one connecting to the wall socket and the other, optionally, to a phone. You can now connect the interface to the mains and turn the computer on. Bingo, full computer/telephone symbiosis!

T'Phone actually consists of two

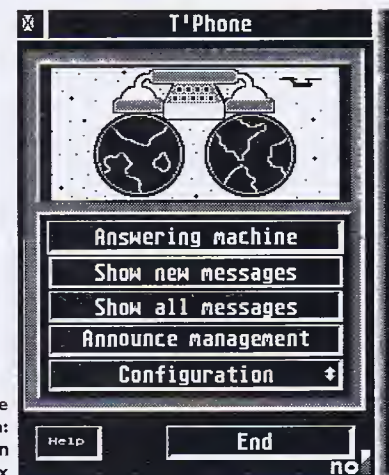
ST phone

With this new product from Compo, you can turn your ST into an incredibly versatile answering machine

programs: a "software phone" accessory and "software answering machine" program.

Installation consists of copying T_PHONE.ACC and the whole TPHONE directory to the C partition. Numerous samples of useful sounds are provided but these can be customised and copied elsewhere on your hard disk later. In total you need about 1.4Mb. The minimum resolution required by the program is 640 x 200 pixels.

The accessory sports features normally found on a "real" phone. For example, you can choose between pulse and touch tone dialling and there is also a "mute" button to play canned music - a



T'Phone program: main dialog box

sample of your choice. The more exotic features let you choose any ring sound - another sample - and you can listen to your conversations through the computer's speaker.

Two handy features which are missing at this time are a phone book and a charge counter. It would also be nice to have automatic logging of all calls.

The main program, T_PHONE.PRG, offers all features of a standard answering machine and more. The system comes already configured and ready to go.

REMOTE ACCESS

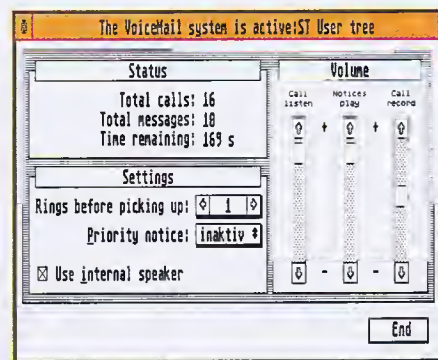
There are several types of outgoing messages: standard, before and after recording. A priority message overrides the "before" for a quick note such as "back in a sec" without having to reconfigure the system. Another special message announces that the drive is full or the recording has been explicitly disabled.

When you call using remote access there are three further messages: when a remote code has been detected, before incoming messages are replayed

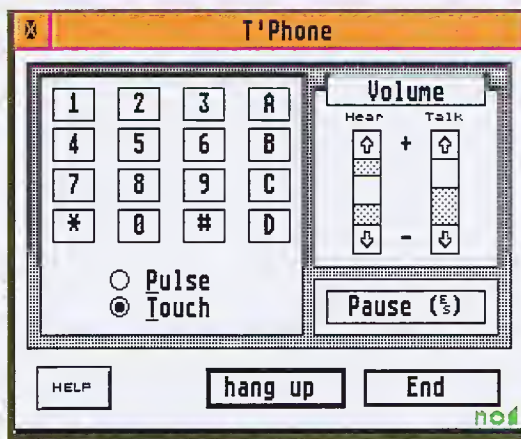
Stamp of approval

At this time the interface hardware is not yet approved although this is pending. Ignoring for the moment the fact that the whole approval procedure is perverted - it should be up to government regulators to prove that a device is "guilty", rather than for companies to prove their device's "innocence" - the procedure has just become much easier thanks to the Maastricht treaty.

It's no longer necessary to have a telephone device approved in all 12 European Union countries individually. Instead, once a device has been approved in any one country it's instantly legal in all others.

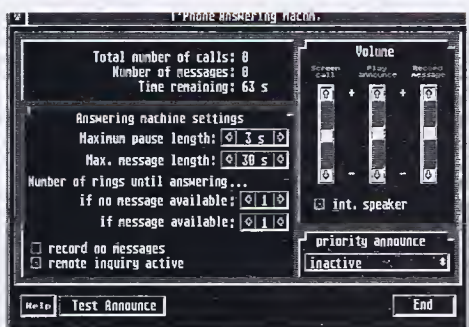


VoiceMail in action awaiting a call



"Soft phone" T'Phone accessory

home



"Soft answering machine": main T'Phone program

and when there are no messages. All of the above outgoing messages as well as ring sound and canned music can be recorded directly from the settings dialogue.

In the configuration dialogue you can set the volume for both ring/incoming sound and the recording threshold. There are five different sampling frequencies from about 8 to 21 kHz. Even though a lower frequency may result in some loss of quality it makes up for it with shorter files. You can also choose between 8 and 16-bit sample quality. If you choose 8, the sound quality suffers but a special dynamic 8-bit amplifier is provided to compensate for this. Finally, if you're low on disk memory you can limit the amount T_PHONE uses.

Turning on the answering machine invokes the main dialog box showing the total number of calls, number of messages and remaining free time in seconds. To save disk space the program stops recording after a pause is detected or maximum message length is reached. The pause can be set to 1-99 seconds and maximum message length to 1-999 seconds.

The answering machine picks up the phone after a variable number of rings

(1-15), depending on whether any messages have been recorded or not. By using different values you can save a toll charge when calling in with remote access to check your messages. For example, setting no message rings to 6 and message present to 4, you can hang up after 5 rings knowing there are no new messages.

The most powerful feature is remote access to "call home" and check your messages. This only works with touch tone phones where you press the "*" button and then enter your code. This gives you remote access to the program.

Finally, if you install T_PHONE.PRG as an AUTO application and a power failure occurs, it will sort itself out and automatically start up in answering mode when the power returns.

T'Phone is on sale in Germany and should be available in the U.K. as soon the manual is translated. The German manual is brief but quite adequate as the programs themselves are very easy to use and pretty much self-explanatory thanks to copious online help.

ST User also got an exclusive sneak preview of Compo's VoiceMail system which will be provided as an upgrade to T'Phone owners. The supplied version was fully functional and the program will be shipping shortly.

NOOES

The basic concept in Compo's VoiceMail is that of application. You create it by building a tree of actions the system should take. The tree is composed of nodes. These are tailored to caller's responses. Again, the caller must have a touch-tone phone or one of those hand-held tone generating units.

All applications start at the root node. First of all the callers identify themselves by entering a code. This approach provides for multiple security levels and you can also deal with people without a distinct id i.e., general inquiries.

Depending on who is calling, the application then branches out accordingly. At each point there is another node with one or more choices. The system is very powerful and you can build very complex trees and let the user/caller navigate through them depending on their own requirements.

To help you build an application, the final program version will have a graphic representation of the tree.

You can also vary the response depending on the time of day or day of



Each user's access can be customised

the week. This is completely flexible to allow any combination of times and days.

Once the call has been completed all responses are stored. This includes any messages the caller may have left as well as keyed-in responses. For example, a company can set up a system where the caller can place an order simply by pressing telephone keys. At the end the caller can also leave a voice message or ask to talk to a person. The beauty of a computerised system is that it's limited only by user's imagination.

POWERFUL

My overall impression of the product was that it's up to high Compo standards. The hardware is very straightforward and easy to connect. The software is not only incredibly powerful but is being continuously improved.

The pleasure of having your phone system literally at your fingertips is quite overwhelming and very liberating, particularly if you connect a headset with a built-in mic, since you can then talk and work at your computer at the same time.

For a professional user it's worth buying a Falcon just to run T'Phone/VoiceMail, and yet the pricing of the package is so attractive that even a casual Falcon home user can easily afford it.



The hardware interface which sits between your phone and the Falcon

BOTTOM LINE

FEATURES

Both exceed the features available on equivalent "real" devices

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Simple hardware installation, self-explanatory dialog boxes and online help

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Includes initial hardware interface on which future programs will be based

Excellent
Good
Average
Bad
Appalling

Product: T'Phone/VoiceMail phone interface

Supplier: Compo, 7 Vinegar Hill, Alconbury, Weston, Huntingdon, PE17 5JA

Telephone: 0487-35 82

Price: Interface + T'Phone - DM399 (about £160)
Interface + T'Phone + VoiceMail 599.00 DM (about £240)

Configuration: Falcon, TOS 4.01, minimum resolution 640 x 200

Perhaps Atari missed an opportunity to break into education or perhaps they never had a real chance given the government support for Acorn and Research Machines. But there are many people who would still argue that the ST series was the ideal machine for schools: cheap, user-friendly, far more powerful than the BBC and the IBM-compatibles of the mid-eighties, and capable of emulating the other major platforms when needed.

Its widespread use as a games machine would have been an additional incentive for many families to buy their own ST for both educational and leisure purposes — instead, many well intentioned parents invested in Acorns only to see them abandoned by their offspring for games consoles.

Tony Adamo is one of these people. Like many teachers who initially bought STs for their own use at home, he was quick to spot their potential for classroom use: colourful graphics, no complicated operating system to configure, an intuitive user interface and, of course, the highly competitive price.

Unlike many other teachers in this position however, he refused to accept that the official acquisitions policy could not be changed and stubbornly argued to be allowed to spend some of his budget on Atari's rather than the recommended Research Machines boxes.

Using his own ST for demonstration purposes, he won the argument and STs began to find their way into George Dixon School in the city of Birmingham where Tony has been Head of Technology for the past four years. Yes, Technology, not Information Technology, for rather than breaking the continued monopoly of the established standards in the IT department, the STs in George Dixon School have carved themselves a nice little niche in those areas where creativity and flexibility rather than pure number crunching are



All over the school, references to the role of Atari STs can be found: here a student acknowledges the assistance of the Mega STE on her artwork displayed in the school's reception area

required: art and crafts, illustration, video editing and, as you would expect, music.

The school itself is, at first sight, a rather typical example of an inner-city comprehensive in a multi-cultural environment. Located on a main road, with a cluster of strictly utilitarian and slightly run-down extensions around a solid Victorian red-brick core, it covers the less fashionable end of Edgbaston.

DEDICATED

Any prejudices the visitor may have about such schools are immediately dispelled upon entry through the bright, friendly reception area: this is clearly a school with a very strong sense of purpose, dedicated to work and high standards of discipline and academic achievement. It is one of a small number of schools to have opted out of Local Education Authority control in favour of grant-maintained status, and is now pursuing Technology College status. This, I was told, had greatly improved the school's resources, although it was, of course,



A project to design posters promoting Birmingham as a centre of the arts makes heavy use of Calligrapher's ability to print high-quality display fonts

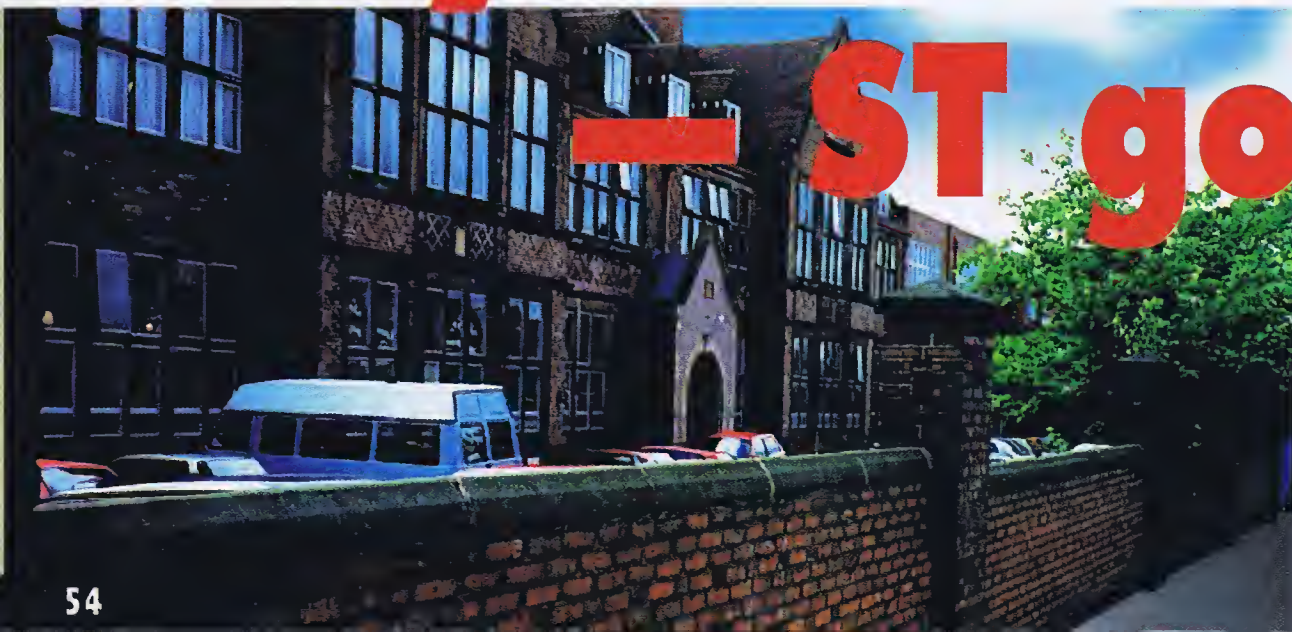


highly controversial politically.

Computers are everywhere in George Dixon School, and the variety is unusual. Apart from the array of Research Machines networked in the main computer room, IBM PCs and a few surviving Acorn BBCs, I spotted several Apple Macintoshes and even a Commodore Amiga, the latter peacefully co-existing with Atari's in the Arts and Craft room.

It was here that both the ethos of the school and the creative uses to which Atari computers can be put were most strikingly demonstrated. A small group of students were working over a variety of projects, the relaxed atmosphere under-

Hey teacher — ST goes



With about 800 pupils, George Dixon School is not quite as big as the imposing Victorian frontage and the vast playing fields behind it would suggest



lined by a radio playing in the background and the complete lack of panic as I entered the room accompanied by Tony Adamo.

The students were only too willing to show me examples of their Atari-assisted work: designing multi-coloured fabric patterns on screen before producing the real thing; using scanned images as templates for hand-painted illustrations;



combining such illustrations with computer-generated lettering in the design of posters. In one corner, a student was hunched over a 1040 STE editing a digitised video sequence while in another a scanned image was being touched up on a Mega STE.

The students' enthusiasm for the STs was obvious and genuine but I could not help thinking to myself that despite all the ingenuity and creativity on display here, the machines were only allowed to show a fraction of their full power and potential due to resource restraints.

Only the Mega STE has a hard disk, for example, while on all the other STs the speed and capacity of floppy disk drives must be a limitation, for example with

The 2Mb Mega STE is used predominantly as a scanning work station, preparing scanned images for printing and incorporation into a variety of art and design work

video editing. With all respect to the Timeworks DTP software used, I wonder how much more could be done with state-of-the-art packages such as Calamus SL and DA's Layout.

Tony Adamo readily agrees. He has recently invested in DA's Vector for more graphics power and would dearly like the large screens, graphics cards, expanded memory and peripherals such as a flatbed colour scanner and laser printer to do full justice to the creative potential of Atari computing. But there's always the problem of money...

The current hardware count in Tony's department is four 1040 STEs plus one 2Mb Mega STE, with two colour and three mono monitors, with a variety of dot matrix and inkjet printers — some of them capable of colour — attached.

Scanning and video frame capture and editing are performed using an Alfa Data monochrome hand scanner and a Vidi-ST interface. Tony has a good working relationship with local Atari specialists Titan Designs and is full of praise for the support he has received from Titan's David Encill: the next item on his shopping list is one of Titan Design's Genlocks to boost the video-related activities which have proved so popular with students.

There is certainly no question of the commitment to Atari being lessened, and as soon as funds allow, the Falcon 030 is likely to find a nesting place in George Dixon School, perhaps even accompanied by a TT.



Playing around with digitised video images is one of the most popular pursuits on the Technology department's STs

to school

If you thought that the only place for STs in schools was as a topic of playground conversation about games, think again. Günter Minnerup found Atari on the curriculum in a busy inner-city comprehensive



Tony Adamo — no relation to the 1960s pop singer, he assures me — has been an Atari user (and ST USER reader) for many years, and took on the educational bureaucracy to have ST approved for use in his school

A look at the software being used reveals some old friends. I never cease to be amazed by the longevity of programs which I had long thought consigned to the digital graveyard, superseded — if the reviews in the glossy magazines are to be believed — by updated, more feature-packed packages.

But everywhere I go in my quest for Atari computers in "serious" use, I find that old classics such as First Word Plus, Degas Elite and Timeworks DTP have retained their loyal band of followers. This is particularly true in those areas where simple routine tasks have to be performed frequently and repetitively: users do not want to break with old habits that have served them well and in any case do not need the additional features on offer.

Much of the administration of Tony's Technology department, for example — class lists, equipment inventories and so on — rests upon the tried and tested abilities of First Word and Fast Base, while old workhorse Degas is still the favoured tool for rough-and-ready colour sketches.

SOPHISTICATED

For other purposes, more up-to-date (though still hardly state-of-the-art) software is used. More sophisticated colour work, for instance, is handled by Deluxe Paint. The fact that this is also available on the Commodore Amiga which shares the Art room with the STs is an additional bonus since files can be transferred between the two using the IBM PC disk format as an intermediary.

For the more technical drawings, Megapaint with its combined bit-image and vector capabilities is the favourite "computer-aided design" tool. A glass-cased display shelf in a corridor of George Dixon School resembles a branch of the other Dixon's with rows of stereo and video equipment mock-ups designed using Megapaint on the ST.

For text-based work and fancy lettering, the quite modern (though now sadly unsupported) Calligrapher is chosen for its high quality printed output, although I suspect that the newly acquired DA's Vector will soon establish itself in this area once its capabilities in the display font area have been discovered.

The Alfa Data scanner came bundled with Migraph's Touch Up image editing software and this has proved quite adequate for the monochrome-only images



A hard Acorn to crack

Mention the words "schools" and "computers" in one sentence, and what comes to mind? The BBC, of course. For most of the 1980s, Acorn's odd machine held almost unchallenged sway in the educational sector, as a result of heavy promotion on television and, more importantly, a government decision to base the introduction of the nation's children to the wonders of Information Technology on British-made computers.

All over the country, jumble sales were held to finance the acquisition of Acorn BBCs and teachers struggled to devise useful programs in BBC BASIC. The few commercial software houses bothering with the educational market at all wrote for the BBCs (and, to a lesser extent, the Research Machines platform).

All this started before the IBM PC established itself as the industry standard, and before the Apple Mac was even heard of this side of the Atlantic, so perhaps the decision to go for the somewhat quirky yellow slab was understandable. The BBC was certainly of very solid build, being encased in metal rather than plastic and therefore ideally suited for the rough-and-tumble of the classroom.

The only trouble was that once it had been established as the standard school computer, it proved difficult to shift when it became clear that the real world of computing took little notice of the Department of Education and Science.

Acorn had found themselves a nice niche market and followed up the successful BBC with the Archimedes. It is only recently that the virtual monopoly Acorn enjoyed in the education sector has been broken by the seemingly unstoppable spread of PC clones. Research Machines also retain a certain following, while Apple has had limited success in their drive to sell the Macintosh to schools and colleges.

Their popularity is largely based on the simplicity of the user interface

produced by the scanner. The Technology department covers an extremely wide range of activities, from graphic design to woodwork and metal bashing, and Tony Adamo is always looking to find new applications for his versatile STs. The latest area under investigation is electronic circuit design, and once he has found a suitable software package, the Atari computers will be in even heavier demand than they already are.

Their popularity with students is largely based on the simplicity of the user interface. The computer does not get in the way of the job to be done, and there are no complicated command sequences to learn.

From the teacher's point of view, it's the low price, the versatility and, perhaps surprisingly, its sturdy reliability in day-to-day use that counts for most. Despite their somewhat flimsy and plastic appearance, the STs have proved to be extremely tough in the demanding environment of a

busy school.

The Music department turns out to be inaccessible to me for the very good reason that there is a class in progress and judging by the intense concentration on the faces of both pupils and teachers, it does not seem advisable to disrupt their current activity. I content myself with a peep through the glass windows and catch a glance of the department's ST surrounded by mixing desks, amplifiers, loud speaker boxes and a vast array of electronic keyboards.

Tony explains that the new music teacher is an experienced musician with a long history of using Midi gear and sequencing software on the Atari platform: the school makes extensive use of Notator and will soon also acquire Cubase.

This, of course, is a common pattern: the inclusion of a Midi interface in the original ST design was not only a masterstroke in terms of establishing the ST as the pace setter in the music scene, but also introduced it to many music departments in educational institutions.

Looking for an ST in a school or college, you would do well to begin your search in the music department. But there is no reason at all why Atari computers should not have found much wider use in education, as the George Dixon School in Birmingham shows along with a few others in different parts of the country.

Perhaps it is too late for such an initiative now, but it occurs to me that a determined push on the part of Atari for the use of the Falcon in schools might well yield surprising results.

Hard-pressed as most schools are in their budgets, a special educational price for a machine with such outstanding video and music abilities and such a vast range of readily available, high-quality software for all applications might prove extremely popular.

And then I dream on, about a showcase school being equipped by Atari and the Atari-related software and peripheral houses with all the latest hardware and programs, to show just what the platform is capable of and how favourable the price-performance ratio still is when compared to PCs and Macs, let alone Research Machines...



Computers are everywhere in George Dixon School

Analogic Computers (U.K.) Ltd

Unit 6, Ashway Centre,
Elm Crescent,

Kingston-Upon-Thames, Surrey KT2 6HH

Mon-Fri. 9am to 6.30pm Sat 9am to 5pm

TEL: 081-546-9575

FAX/TEL: 081-541-4671

ANALOGIC
ANALOGIC
ANALOGIC

OFFICIAL ATARI REPAIR CENTRE

• COMPUTERS • MONITORS • REPAIRS WITHOUT DIAGNOSTIC FEES

520/1040 ST/STM/STF/STFM/STE	*£59.95	} including delivery back by courier service
Monochrome, Colour Monitors excluding CRT, L.O.P.T.	£59.95	

★ We pick up computers for repairs and memory upgrades for Next Day delivery to us by Courier Service for only £6.00 + VAT

MEMORY UPGRADES

MARPET DEVELOPMENTS OFFICIAL XTRA-RAM DELUXE INSTALLERS

520 STF/STFM to 1 Meg	£59.95	520 STE to 1 Meg	*£17.95
520 ST/STM/STF/STFM to 2.5 Meg	£79.95	520 STE to 2 Meg	*£59.95
520 ST/STM/STF/STFM to 4 Meg	£129.95	520 STE to 4 Meg	*£114.95



PROTAR PROFILE SERIES II HARD DRIVES

QUANTUM/MAXTOR MECHANISM WITH CACHE

Compatible with all ST/STF/STFM/STE/Mega ST/Mega STE/Falcon

Profile 50DC & 85DC	£CALL	Profile 170DC	£349.95
Profile 120DC	£299.95	Profile 240DC	£449.95

● POA for Higher Range of Profile Series II and SCSI Bare Drive

GOLD AWARD WINNER PROTAR PROFILE SERIES II HARD DRIVES have features such as:

- Auto-Booting ● Auto-Parking ● Read/Write Access ● Password Privileges ● Selectable Boot Partition
- DMA Thru Port ● Quiet Fan ● Device Number Switch ● Hard Disk Management Software package
- Full Utilities package and De-bugging Software ● 45 Watt PSU and all necessary wiring in place to mount another Bare Hard Drive in elegant housing.

SCSI BARE QUANTUM HARD DRIVES

WITH CACHE

50Mb & 85Mb	£CALL	170Mb	£249.95
120 (Maxtor) Mb	£199.95	240Mb	£329.95

STFM, STE, FALCON 030 COMPUTERS

**We shall try to beat any genuine
advertised Falcon prices**

P.O.A.

STE/STFM 2.06 TOS SWITCHERS

with Hardware Switch

The only Solderless DIY Kits available

STE TOS 2.06 Roms	£39.95	STE TOS Switcher + 2.06 Roms	£59.95
STE TOS Switcher	£39.95	STFM TOS Switcher + 2.06 Roms	£64.95

MONITORS

AMITAR £129.95

High Resolution Monochrome Monitor including VAT
excluding delivery

POWER SUPPLIES

STFM/STE Power Supplies (Service Exchange)	£29.95
NEW STFM/STE Power supplies	£49.95

PRINTERS — HP310 / 510 / 550 Colour — POA



- All prices include VAT and NEXT DAY DELIVERY subject to availability
- Fixed charge for repair does not include Disk Drive Replacement & Keyboard
 - All prices subject to change without notice
 - We reserve the right to refuse any ST Repair
 - Please allow 5 working days for cheque clearance



*FREE
FITTING

(subject to availability)

GUARANTEED SAME DAY DISPATCH

NEW VERY LOW LOW PRICES

Professional Service with no surcharge

WHILE-U-WAIT!!

FOR A
LIMITED
PERIOD

SPECIAL
OFFER

♦ MEMORY UPGRADES ♦ TOS UPGRADES ♦ DISK DRIVE UPGRADES ♦ EMULATORS ♦ many REPAIRS

MERLIN

TEL/FAX: 0453 882793

We are really thrilled at the interest you are showing in our Library.
We offer a service which we think cannot be bettered.
We ask you to select what you want on disk and so no more unwanted programs.
All this for £1.25 inc. p&p.

PD & Shareware - £1.25

- MPD1661 - Invoice Master** - An accounting package for small businesses.
MPD0796 - Planetarium - A journey through the stars with Degas pictures.
MPD0825 - Michael's Big Adventure - Adventure story for younger children.
MPD1793 - Wuzzles - Well reviewed Hangman game for children.
MPD1508 - Aliens (1 meg) - Strategy game based on these popular films.
MPD1738 - H-Mec 2 - Pacman clone for the STE.
MPD1862 - Utopos 1.5 - Demo version of this great shoot 'em up. (STE 1 meg.)
MPD0828 - International Cricket - Just the job for when rain stops play at the Oval.
MPD0988 - Star Trek - 25th Anniversary disk magazine.
MPD1577 - Font Master - Create new fonts with this package.
MPD1912 - Dunces' Cap compilation - A collection of 4 earlier games from this popular author.
MPD1913 - Frame of Mind - The latest Dunces' Cap game, four challenges in this good challenge.
Stosser - The disk magazine for STOS programmers and users. All issues available. £1.25 per issue.

Licenceware - Individually priced as shown:-

- OCL001 - Dead or Alive** - A text & graphic mystery with loads of humour - not to be missed £3.00
OCL002 - Murder on the Orion Express - A space murder mystery with lots of humour £3.00
OCL003 - Sprite works - 2 disk aid to designing games using GFA basic £7.00
RE001 - Arthur of the Britons (1 meg) - A strategic game as Arthur repels invaders £3.00
RE002 - Conquest (1 meg) - A variation of Populous £3.00
SS001 - Mobster City - Visit towns and find the killer £3.00
BU104 - Jetpac - Build your rocket and escape from the planet £2.75
TP001 - Zuffers - A really challenging puzzle game £3.00
SES007 - Word race (Ages 4+) - A type of hangman for the younger child £2.95
SES009 - Math Fun (Ages 4+) - A good introduction to simple arithmetic £2.95
Art - Artists Freehand - A very good art package £2.50
EXC1 - ProbeST v2.10 - The registered version available exclusively from us £3.95

Issue 3 of **ST Handbook** the printed magazine for the PD market is now available from us at £2.50 inc. p&p.

We stock **Budgie, Powerlist, Shoestring Educational Software**. Licenceware ranges.

Authors! Send us your programs for review and inclusion in our catalogue.

Our catalogue is available free if you order other disks using the coupon below or just send 3 x 25p stamps.

We shall be at the Atari Users shows in Bristol and London on July 30/31 helping to run the **OFFICIAL GAMES CHALLENGE** organised by **MERLIN/ST HANDBOOK** (in conjunction with Euromag). Your chance to win a Jaguar and lots of other goodies!! Further details available from ourselves on request.
We look forward to meeting you and giving you the chance to find out about us.

Obsession

the game of the 90s will be here very soon, for all STE (1 meg users). Don't miss it!

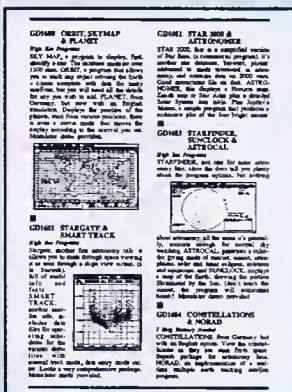
Please send me the following disks:

No. No. Name
No. No. Address
No. No.
No. No.
Disk Catalogue Yes/No
(please send 3 x 25p stamps). Postcode
I enclose cheque/P.O. for £.....
Merlin PD, 11 Grange Close, Minchinhampton, Stroud, Glos. GL6 9DE

GOODMAN'S Public Domain & Shareware Service

Association of Shareware Professionals Approved

Our catalogue is not a simple ABC list of programs, but is over 220 pages of information, with screen shots and descriptions for hundreds of disks of the very best in ST/STE & Falcon P.D. and Shareware.



- **Loose Leaf Format For Easy Updating**
- **Divided Into 11 Main Reference Sections**
- **Complete With Card Index Dividers**
- **Subscription Available For Updates & Amendments**
- **Includes the STOS Source Code Selection**

Send for your copy today

Still Only
£2.95

Inclusive of UK Carriage

Order any 5 disks from the list below for only £9.95 inclusive, and receive a copy of our Shareware Guide FREE!!!

Offer limited to 1 free catalogue per household

GAMES

GD2170 DAVE MUNSIE GAMES
GD2256 WALLS OF ILLUSION
GD2253 TRIAHOO
GD2267 BLOX
GD2276 SNACMAN
GD2275 DCS Compilation
GD2284 PACMAN ON 'E's
GD2290 MEDIEVAL CHESS

EDUCATION

GD2184 ADVANCED FRANGLAIS
GD2248 CLOCKTIME
GD2283 ST GLOBE
GD2176 PICTS TO PARL' 3
GD2293 PICTS TO PARL' 4
GD2296 ROMAN EMPIRE
GD2299 LABORANT PRO

HOME & OFFICE

GD2064 ROUTE FINDER
GD2255 RECIPE BOX
GD2198 MARCEL WORD PRO
GD2295 HEBREW WORD PRO
GD2291 CAL MUSIC FONT

STOS

STOSSER ISSUE 14
STOSSER ISSUE 15

SPECIAL INTEREST

GD1380 MORSE CODE
GD1853 GERMAN TRANSLATE 3
GD2187 FAMILY TREE
GD2251 R.A.E. TUTOR DEMO
GD2271 BATTERY EXPERT
GD2203 ZX81 EMULATOR
GD2205 SPECTRUM EMULATOR

UTILITIES

GD2065 LET THEM FLY (English)
GD2120 TERRA DESK 1.39
GD2280 MASTER BROWSE 4.4
GD2129 TWO IN ONE (English)
GD2173 ST ZIP 2.6 & LZH 3.1
GD2188 MOUSE KA MANIA

TRACKER

GD2259 STORMTRACKER DEMO
GD2286 OCTALYSER STE

GRAPHICS

GD1347 PRINTING PRESS (English)
GD1348 PRINTING PRESS Support
GD2020 CRACKART
GD2035 GEMVIEW 3
GD2038 KOZMIC 4
GD2055 KADINSKY
GD2277 ART FOR KIDS DEMO

Cheques/Postal Orders payable to Goodman International

BULK DISKS

GOLDMASTER BULK
FULLY GUARANTEED

Qty	DD	HD
10	£4.95	£5.95
50	£19.00	£27.50
100	£36.00	£49.95
Incl. Labels		

BRANDED DISKS

GOLDMASTER BRANDED
(Boxed in 10s)

Qty	DD	HD
1 Box	£5.95	£7.95
5 Boxes	£25.00	£37.50
10 Boxes	£45.00	£69.95
Made in the UK		

All prices include VAT & UK carriage

Goodmans (Dept STU)

16 Conrad Close, Meir Hay Estate, Longton,
Stoke-on-Trent ST3 1SW.

Tel: 0782 335650 Fax: 0782 316132



ST ACTION

August 1994

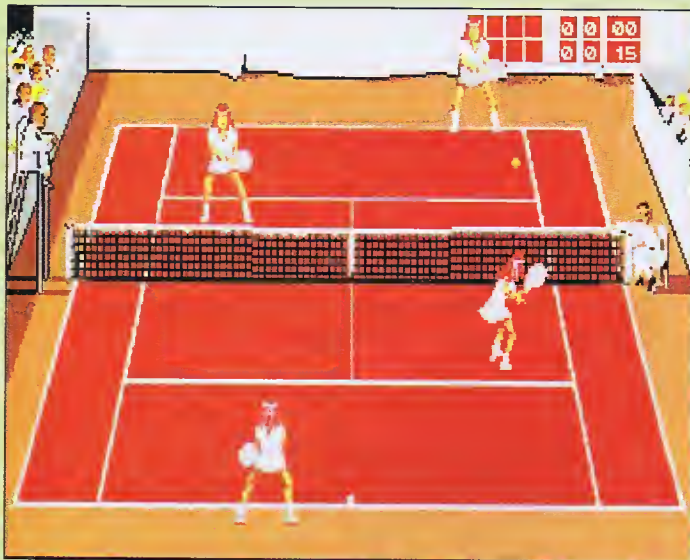
INSIDE

- GREAT COURTS 2
- SENSIBLE SOCCER
- LEISURE SUIT LARRY 3
- CADAVER

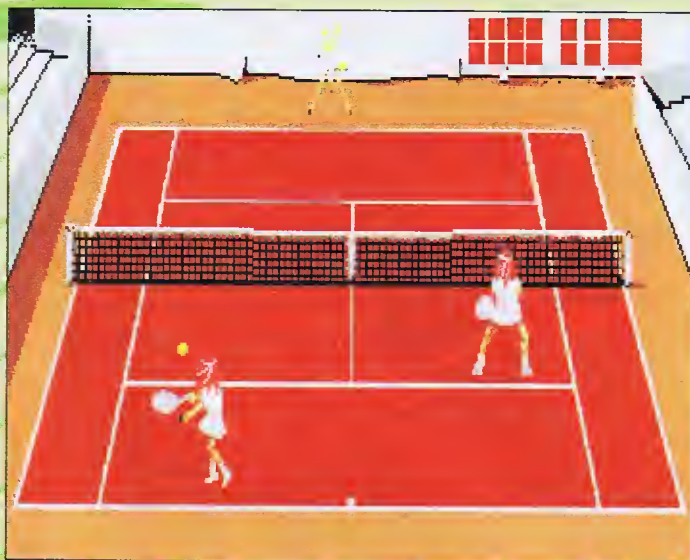
PLUS HINTS AND TIPS FOR
CANNON FODDER AND LEISURE
SUIT LARRY 3

Meteor Doom!

*Bloodhouse's superb
shoot-'em-up
previewed inside*



Doubles action on a tasty coloured court



Face the awesome might of the ball machine

First of all, a confession. I do not like tennis. I have never liked tennis. But from what I can glean from this game, the rules go something like this: You have two players, or sometimes four. If you have four players it's called "doubles", even though it should really be called "quadruples".

There's a net in the middle, and some lines. The players have to hit a little round thing – apparently called a "ball" – over the net until someone misses or everyone gets bored and then they get some points.

You keep doing this until you feel like someone is having an "advantage". And then they win. And everyone swaps around and does it all again. For ever. And then everyone eats strawberries. What a bizarre sport. And why is it called tennis, eh?

Well, of course, I'm not really that blind to the facts of tennis. But I have always wondered just what sort of appeal it holds.

Tennis on the computer baffles me even more. The few games that I have played have been little more than a slightly sparty variation on Arkanoid, knocking a ball backwards and forwards until you miss. So, I'm oshomed to say, I didn't have high expectations for Great Courts 2.

This wasn't helped by the fact that everyone

else in the office has declared it the supreme overlord of all games in the history of the world, and now play it all lunch time rather than indulging in the far more noble art of propping up a bar. Maybe I'm missing out on something.

Unfortunately the game is French and uses a French keyboard configuration, so pressing the "q" key gives you an "o", that sort of thing. Not much of a problem, until you have to enter the copy protection and spend hours trying to find out which key will give you an "m". So, I'm a bit grumpy before I've even picked up a racquet.

RATHER SMART

The actual game then. Well, to begin with I found it very confusing to watch. The collision detection seems a tad dubious at times, and you may seem to hit a ball that is miles away, or the ball may appear to go straight through your racquet. You can also walk over the ball bay as if he were a cardboard cut-out. This is just a minor graphical anomaly, but the collision detection definitely creates a rather annoying element of blind luck. You end up just hitting fire and hoping it works.

I also found it difficult to actually aim the ball when returning a volley. The computer can

GREAT

field skilful shots right across the court, whereas human players are stuck with just knocking the ball back the way

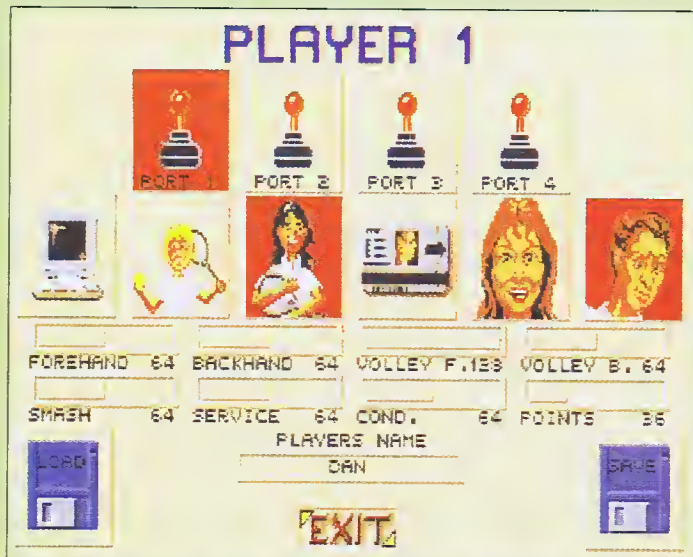
it came. You can, allegedly, aim your shots by moving the joystick as you press fire, but I still haven't managed it without my player standing like a prot and waving frantically with the racquet long after the ball has rocketed past them.

Naturally, I hated my

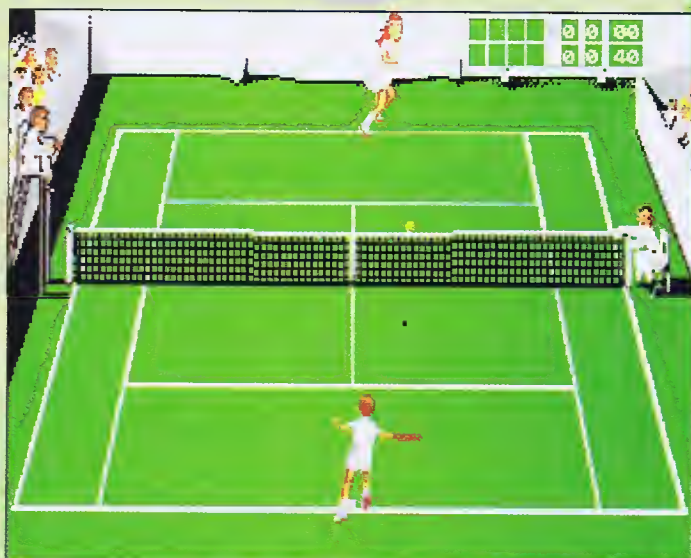
first few games and vowed to pummel its white-socked head into the turf with my reviewing bile. Then I tried it again, and quite enjoyed it.

A few two-player games and I was starting to doubt my former nosiness. In the end, I have to admit that it is a rather smart little game.

It's as a two-player game that it really comes into its own, when you know there's someone else on the court



Tailor your player to suit your own tennis style. Or something technical like that

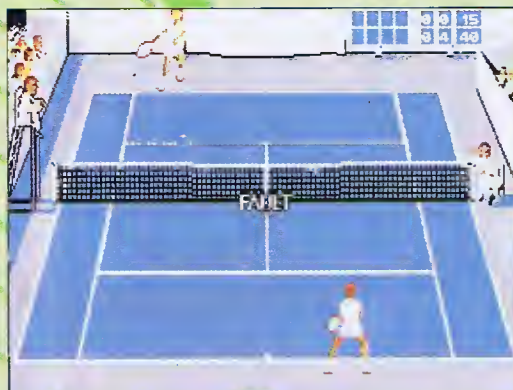


The chalky white lines and the squelching of the ST pretending it's at Wimbledon

BUDGET ACTION



One atrocious service coming up, courtesy of my not-so-hot tennis skill



Expect to see this screen quite a lot

COURTS 2

— either playing as your opponent or your doubles partner — who isn't an indestructible tennis machine. This is probably the game's biggest stumbling block: the computer players don't slip up often enough, and it's much more rewarding to play a human who can at least be outwitted.

There are options to improve your player, or practice against one of those ball-spitting machines. There's also a novice mode where the computer moves your player far away, allowing you to practice your shots, but this reduces your role to prodding fire over and over again. As the computer rarely misses, this continues far ages until you get bored and make a mistake.

Tennis. Strawberries and neat lawns. The sport of gentlefolk. And Atari users. "New balls please," cries the umpire

The graphics are easy on the eye, and despite the occasional confusion as to whether you really missed that last ball or not, everything is reasonably realistic. It's just a pity that the sound is so agonisingly bad, with unbearable squelches when the racquet and ball meet.

Despite having no love for the game of tennis, I did start to enjoy this after a while. I think that practice is the key here. With perseverance this becomes an enjoyable little knockabout, but the controls require a lot of patience to master. Be prepared to be humiliated by the computer many times before you

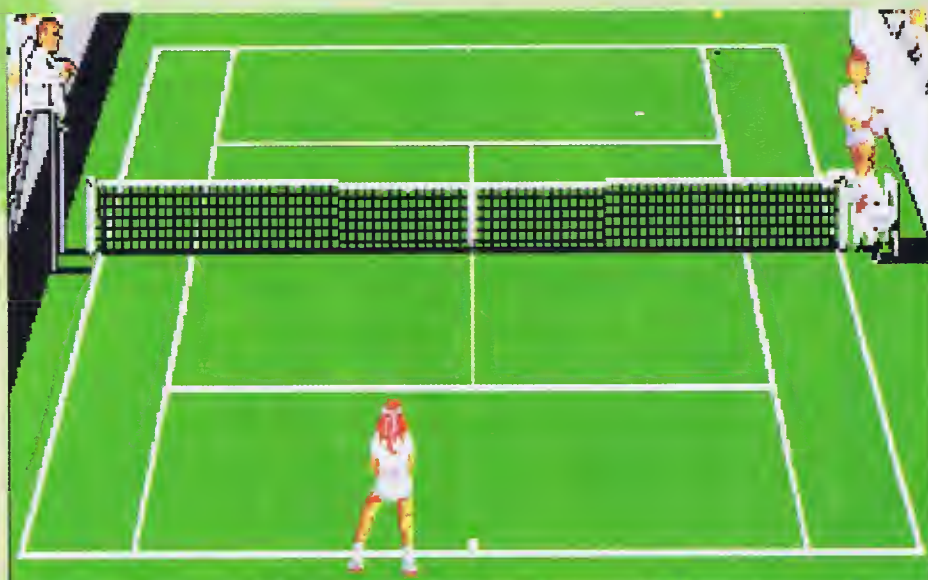


If things get too tough, gang up on the computer with a friend

realise the game's true potential.

With other human players this is probably as good as any tennis game, against the computer it's a teeth-grindingly annoying ego massage for the CPU-controlled sprites. To be honest, I won't be returning to Great Courts 2. It may not be my cup of tea, but I can at least recognise that for tennis fans this is a piping hot Earl Grey with just the right amount of milk. A good tennis game. And coming from me, that's quite a compliment.

DANIEL WHITEHEAD



Only Great Courts 2 lets you stand on top of the ball boy

VISION

★★★★★☆☆☆☆

AUDIO

★★★★★☆☆☆☆

DIFFICULTY

★★★★★☆☆☆☆

LASTABILITY

★★★★★☆☆☆☆

Initially very difficult to master, this game can be quite fun, especially with more than one player. Be prepared for frustration though.

78%

Publisher > UbiSoft
Developer > Blue Byte
Disks > 1
Price > \$9.99
HD Install > Yes
Size > 512k

If you're still smarting from vivid memories of that devastating San Marino win that knocked England out of the World Cup or still sending the hate mail to Graham Taylor and chucking out your "England for the World Cup" T-shirts in disgust, fear not because now you can play one of the best footy games on the ST and get to play in your own World Cup instead via the brilliant Sensible Soccer.

"But, Sensible Soccer doesn't feature the World Cup," you say smugly. "Well it does now" is my rather know-it-all reply.

Renegade, not content to publish a top class football game and then follow it up with what looks like a brilliant sequel (The Sensible World of Soccer), have in the meantime (just in case you're feeling deprived of football) brought out a limited edition, International version.

Put your cynicism to one side because here you have the opportunity to update your old version for £8. Alternatively if you've never experienced the delights of one of the best soccer games ever, you can buy this new edition for £19.99.

ADDITIONS

So what do you get for your money? Well, a referee has been added, ready to brandish those red and yellow cards should you (accidentally, of course!) commit a foul. The gameplay has been tweaked but most importantly, all the teams and fixtures from the World Cup have been included.

Hmm, so no England then? Well, actually, you can change the teams in the game right down to the players' and managers' names. So if you really want to include England, the choice is yours...

The World Cup Championship means getting your team through the various qualifying rounds, and then to the dizzy heights of the final. The teams are ordered into six groups of four teams and three points are needed for

the original Sensible Soccer (if there is such a mortal) or for those who need their memories refreshing, I shall briefly remind you of the joys of this soccer classic.

The game's popularity lies initially with its intuitive controls and the fact that it's just so instantly playable and easy to get the hang of.

Graphically the game caused quite a stir with Sensible Software firmly stamping their trademark on the game in the form of small sprites (also found in their Cannon Fodder and Mega Lo Mania games). These work exceptionally well and, although they are smaller than the sprites normally employed in soccer games, they allow for some fast and frantic gameplay.

Although there aren't as many options in Sensible Soccer as in other footy games there are enough to tailor the game, to your needs in some way, from Game length (3,5,7 or 10 minutes) to a novel feature called Seasonal Weather where each month has been given a specific

weather pattern. These limited options work to its advantage in that the game is easy to set up and quickly get into. A nice touch is the ability to completely change teams, even down to which strip they play in.

Two-player mode is where Sensible Soccer really shines though, and if you can find a chum

The tension reaches fever pitch, fans fanatically cheer for their side, the action is frantic, the competition fierce...and that's just the computer games...

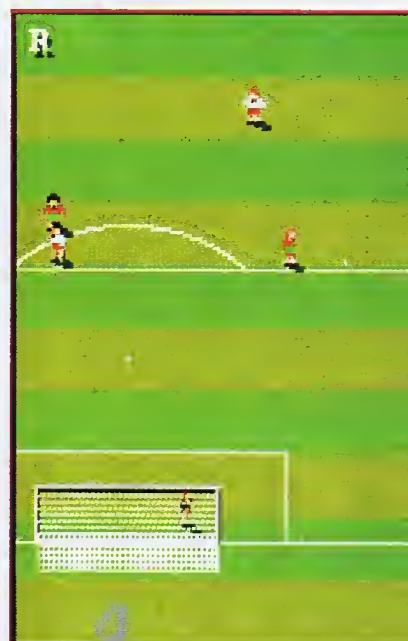
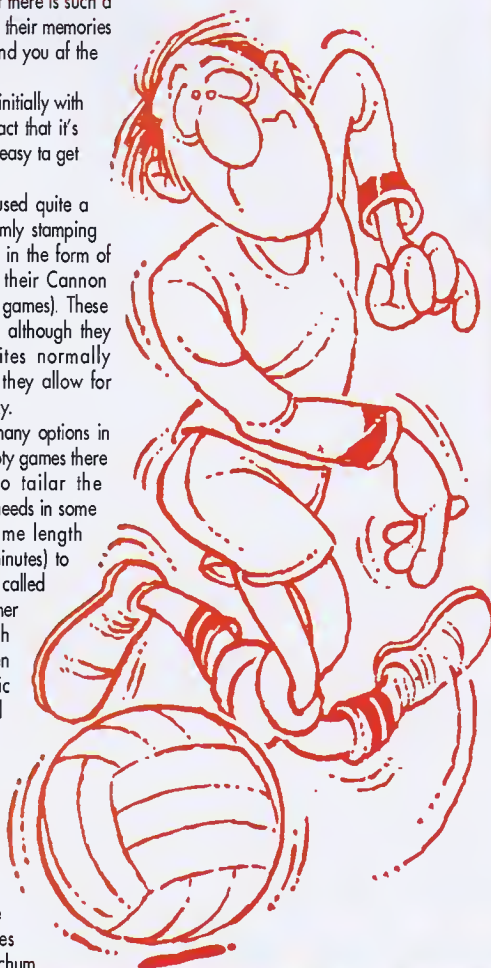
International Soccer-World



a win. The top two teams from each group plus the four best third places qualify for the next round and the tournament continues as a knockout right through to the end.

Also different from the original is the inclusion of the Back Pass rule (the Goalkeeper can no longer handle the ball when you pass or kick it back to him) and the Suspensions rule brought in for all league, cup and special matches.

For those not familiar with the delights of



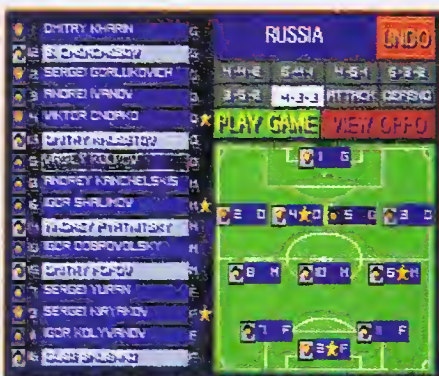
to play with, you're in for a really exciting, fast-paced match.

The offside rule has not been included in the game which makes for a fast, flowing game.

The usual moves can be carried out and are achieved easily. Sliding tackles and headers can be quickly mastered through good joystick timing and a bit of judgement. Set pieces work in the same way as normal kicks and throws and although the system is less advanced than in Goal, it allows throw-ins



View how the opposition are shaping up



Work out tactics carefully to win the match



Small sprites, now trademarks of Sensible Software

ACTION GAME

Sensible Champions



The replay mode allows you to see your stunning goals

and the like to be taken quickly. Atmosphere is another great aspect of Sensible Soccer and crowd chants and cheers create the atmosphere of the international match well.

All in all, a sufficient number of new features have been added to warrant updating your current version, especially if you're a stickler for having the latest thing. The new referee sequences are a nice touch, the sprites seem brighter and slightly clearer and the goalkeepers have been enhanced.

BRILLIANT

Sensible Soccer is undoubtedly a brilliant game. But with The Sensible World of Soccer being released later this year, promising all the playability of the original plus a huge management angle, this begs the question of whether you should buy it now or wait and see. It's a tough choice!

If you've not got Sensible Soccer then it could well be worth investing in and if you already own a copy and really do want to update your version then go for it. For a soccer game that is easy to get into and for a quick "kick-about" Sensible Soccer can't be

beaten but if you want something with a bit more depth and a few more options then maybe waiting to see what else is on the market would be a more viable option.

So now my refereeing is over for the day, I shall hang up my foaty boots, and get ready to watch the start of the World Cup (this was written back in June y'know!). And don't worry, it's only another four years to wait until the next World Cup.....

TINA HACKETT

● This new edition of Sensible Soccer is available now and existing owners can upgrade by sending their original disk 1 and a cheque or postal order for £8.00 payable to the 'Sensible Soccer Offer' to:

The Sensible Soccer Offer
Unit B3,
Edison Road,
St Ives,
Huntingdon,
Cambs, PE17 4LF
Mail Order Hotline for all
Customer Queries : 0480 498889.



The World Cup Tournament is yours to compete in



With the Team Editor you can put England back into the World Cup



And here's the new referee feature

VISION

★★★★★★★★★★

AUDIO

★★★★★★★★★★

DIFFICULTY

★★★★★★★★★★

LASTABILITY

★★★★★★★★★★

Classic football game. Brilliant, addictive action that every gamesplayer should have in their collection.

90%

Publisher > Mindscape/Rene.

Developer > Sensible Software

Disks > 2

Price > £19.99

HD Install > No

Size > 1 meg



The start of the adventure and Karadoc is stuck with a broken-down boat



Pulling that lever will give our dwarf here access to a whole host of new rooms

CAD AVER

If I asked you to name the most influential and admired set of games designers in the ST world then I hope you'd reply "The Bitmap Brothers". The Bitmaps are perhaps the closest the computer games world have got to pop stars. The shade-wearing and ultra hip "brothers" that aren't actually brothers have delighted and entertained ST games fans ever since the ST's introduction to the computer industry.

Almost every game they have touched has turned into an instant classic. If games like Xenon, Speedball, Xenon 2, Speedball 2, Gods, Magic Pockets and The Chaos Engine aren't in your collection, then I'm ashamed of you.

Each one of these products has shined so bright in the graphics, sound, playability and addition departments that you'd have to wear shades (like the Bitmaps) just to play the damn things.

Admittedly all of the aforementioned games have either been platformers or shoot-

Ah the joys of wandering around a dark, dank and damp dungeon. This Bitmap Brothers adventuring classic hits the ST at a superb knockdown budget price

'em-ups, but there has been one product from the Bitmaps that was totally different from all its stable mates and its name was Cadaver.

I'm happy to announce that this classic RPG has just been re-released courtesy of US Gold and their budget label Kixx XL. Cadaver, for those of you who don't know, is an isometric 3D arcade adventure.

You play the part of Karadoc the dwarf and your mission in life is to explore the dungeons and corridors of Castle Wulf, interacting with hundreds of objects, people, monsters and puzzles. Karadoc's ultimate objective is to kill the necromancer Dianos, and as is the tradition with bounty hunters, whatever you find on your quest is yours. Finders keepers, losers

weepers!

Karadoc's skills include the ability to walk, jump, climb stairs, cast spells and fight monsters. By pressing a key you can change between moving in eight directions and moving in four, according to your own personal preference. There are three major modes of controlling the dwarf and his actions: basic movement, interacting with objects and using Karadoc's rucksack.

When wandering around the castle, Karadoc's movement is controlled via the joystick. Pressing the fire button when he is holding nothing will make him jump. When clutching a weapon or a spell, the fire button costs the item.

Objects are manipulated using the icons available and they vary according to the item you are holding (see box for more details). Obviously you can't drink a spell or cast a potion.

There are two ways of using the rucksack: you can either view individual items or take a look at the rucksack as a whole. A quick stab of the spacebar brings up a window which shows the last item in your rucksack which Karadoc manipulated or picked up. The items can be scrolled through using the joystick.

Pressing the Return key allows you to view the entire contents of your rucksack. Initially, you can hold up to a maximum of 32 objects, 16 of which are displayed on screen at once.



Karadoc has to deal with the biggest spider from hell, just to get a rune. I don't know, the things adventurers will do these days!



Investigating those sacks will bring Karadoc into a fight with a, err... maggot from the pits of hell



Walking into that fungi will only do damage to Karadoc, although you can quite happily jump into that worm without too much trouble

BUDGET ACTION



Now how on earth do I get past that wall? Answers on a postcard to "I used to be a lot better at Cadaver when it first came out"

The other 16 objects can be scrolled through using the joystick.

In the very first room in Cadaver you will find your personal log book. This tells you how much gold you have collected, your current health status, how many experience points you've gained and the percentage of rooms you've visited on your quest. A map of Korodoc's adventure is automatically drawn as you explore the castle and its dungeons.

It shows the room you are currently in and the rooms you have explored.



Aha, behind that rock lies a helmet. Unfortunately I haven't a clue where and how I use it

There are three types of spell Korodoc can use: spells which fire a shot, room spells that affect the whole level and object spells. Potions can be found throughout the game and provide a wide variety of effects, not all of which are good. Most potions and spells are labelled, but have no explanation of what they do, so you'll have to experiment a bit.

One nice little touch is that saving your position costs gold, the higher the level, the greater the charge. So this means that you have to look in every room and in every nook and cranny because otherwise you might not have enough treasure when it comes to saving your position at a vitally important moment.

Codover is a very in-depth adventure game and one that is going to take you a long time to complete. Even if you breeze through the quest there is still more adventuring to be done courtesy of the free demo disk "The Pay-off" which is lumped in with the budget package.

As with all Bitmap Brothers games the graphics in Cadaver look absolutely gorgeous and will have you dribbling from start to finish. The only gripe I have is that the actual Korodoc sprite and animation isn't that good and could've been a lot better.

That small insignificant whinge aside, there isn't a lot I can fault Cadaver on. The puzzles range from easy to incredibly hard and the game does get harder as it progresses. It has that nice addiction factor that keeps you coming back for more and more.

You do get a hell of a package for only £15 and ST owners should run down to their local game store to buy it immediately. To sum up, Cadaver looks brilliant, plays like a dream, and lasts a lot longer than your average piece of software.

JONATHAN MADDOCK



Opening the chest will reveal an important parchment giving you details on how to complete this section

ACTION GOLD

Anything you can do, Icon do better

A run-down of some of the main icons that can be used in Cadaver

Icon	Function
Hold	Allows you to hold and unhold objects
Switch	Allows Korodoc to operate switches
Open	Open and close containers such as chests
Pull	Allows you to move an item
Eat	Allows Korodoc to eat any food



Icon	Function
Joystick	Returns Korodoc to movement control
Search	Gives information about an object
Take	Takes an object and places it in rucksack
Drop	Drops an object
Drink	Allows you to drink liquid from an object
Read	Allows you to read books and parchments



VISION

★★★★★★★★★

AUDIO

★★★★★★★★★

DIFFICULTY

★★★★★★★★★

LASTABILITY

★★★★★★★★★

Cadaver is just packed to the brim with some of the most beautiful graphics you will ever see on your machine and is addictive and playable as hell itself. I give my heartiest of recommendations.

91%

Publisher > Kixx XL
Developer > The Bitmap Brothers
Disks > 3
Price > £14.99
HD Install > No
Size > 1/2 meg

The world's most famous lounge lizard is back and he's still looking for love in all the wrong places!

LEISURE SUIT LARRY 3

Leisure Suit Larry is perhaps one of the ST's best loved adventure characters and his lavalace quests have entertained ST gamers for a good few years now. Though aimed at the "adult" market, the Larry series of games have proved very popular with the teenage gamesplayer - it must be something to do with the trials and tribulations of puberty!

The Larry games weren't and aren't that rude, but they still contain that subtle blend of innuendo and nakedness that kids like to love. Grown-ups looking for a truly "adult" game will be severely disappointed.

The first two Larry adventures do look awfully dated when compared to the modern day adventure and the programmers of the Larry series must have noticed this fact when they

updated the third game in the series with a brand new look.

Before you start the game proper you must answer a series of five questions to determine what level you play the adventure at and whether you're old enough to play. Five correct answers will allow you to play on the filthiest level while no correct answers will mean loading the game again.

Larry was created by Sierra, an American software house and the questions tend to centre around their culture and history, so even if you're old enough, you might not get all the questions right. Very annoying, but once you've passed this little test, it's on towards the adventures of Mr Laffer.

Larry has lost his job, his woman and he's back on the lust trail. Donning his white suit and his cheap aftershave, Larry ventures off around the island of Nontoonyt looking for love. The biggest difference between Larry 3 and its predecessors is that this time you don't just control Larry.

This time you swap roles between Larry and a woman called Passionate Patti and naturally your final objective is to get these two lovebirds together. The game, for those who know nothing, is controlled via a point 'n' click interface but, unfortunately, you still have to type in certain commands.

There is no question that this third Larry adventure looks a lot better than any of its fore-runners. The sprites have been suitably improved and the "close ups" are a lot more



detailed. With this in mind you'd be forgiven for thinking that Larry 3 is the best game in the series, but you couldn't be further from the truth.

The game is so slow it totally skews any chance of being playable. Larry literally dawdles across the screen at a rate that a snail would be ashamed of. Nor does he move as fluently as he should and seems to keep getting stuck behind objects at every given opportunity. This is so annoying that it's guaranteed to irritate any adventurer who plays it.

Unlike the first two Larry exploits, there is a hell of a lot of disk swapping to be done if you don't have the luxury of a hard drive. As far as puzzles go, Larry 3 isn't the most taxing adventure in the world, but normal operations within the game seem to be far more difficult to solve than the actual puzzles.

Larry 3 is certainly not the worst adventure

I've ever played, but it was ruined for me by the slow speed. I'm sure there are ST adventurers out there who will enjoy this third Larry Laffer episode especially at this budget price, but for first-time adventurers I would suggest you look elsewhere.

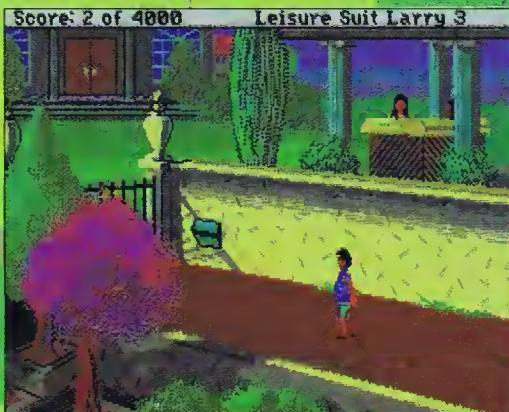
JONATHAN MADDOCK



Not a man to rest on his laurels, Larry dons his white suit in true Superman phone box-style and heads off still looking for love



The start of Larry's adventure and looking through those binoculars will lead to some cheap (and we mean cheap) thrills



Poor Larry. On returning home our hero finds his wife in the Jacuzzi with her lesbian lover!

VISION

★★★★★

AUDIO

★★★★★

DIFFICULTY

★★★★★

LASTABILITY

★★★★★

Leisure Suit Larry 3 could have been the best game in the series since it shines

in the graphics department, a conspicuous failing of its predecessors. But it suffers badly in the playability stakes and the slow speed of the game makes it highly frustrating far even the most experienced and hardy adventurer.

67%

Publisher > Kixx XL
Developer > Dinamic
Disks > 4
Price > £14.99
HD Install > Yes
Size > 1/2 meg

WORK IN PROGRESS

Let's start with the story, shall we? Meet the villain, Professor Schaumund, a nasty piece of work who pokes small animals with sharp sticks, laughs at pensioners' haircuts and when he belches it smells of compost. Oh, and he invades galaxies as well. But you knew that already — he is an evil professor after all.

And just to make sure that nobody gets him under the Trade Descriptions Act he's also fulfilled the final criteria of evil professors and started harassing Princess Vai Levi. As if having a name like that wasn't bad enough, you have to be tormented by a fat biffin who smells of compost. Sheesh.

Anyway, Schaumund's scurrilous minions are already moving in on the peace-loving folk of the galaxy, disguised as meteors. A bit of a logic leap there methinks, but stay with me on this one. They're floating about in space pretending to be bits of rock, which is obviously a thoroughly wanton and aggressive thing to do.

You, being the hero of course, decide that enough is enough and all this space-bound mineral impersonation has gone too far. So you build a spaceship and paint it in nice colours. Then, for want of anything more constructive to do, you fly into space to shoot the bogus asteroids. This sounds like a cue for a game to me. And, by gum, it chuffin' well is.

So, a bit of history then. Stardust came out on the Amiga at the end of 1993, courtesy of a group of groovy foreign coders with the fear-inducing moniker Bloodhouse. The game was basically an updated Asteroids-style blaster (hence the rather inexplicable meteor disguises), but it packed such a graphical punch that it caused several less than sturdy people to topple over in sheer excitement.

It also included several into-the-screen levels that were so smooth you thought they might very well slide off the monitor and leave an unsightly puddle on the carpet. It updated the Asteroids gameplay with the inclusion of weapon power-ups, end-of-level baddies, special maze-like sub-games and ray-traced asteroids.

Naturally the idea of an ST version was slim, and hoots of manic laughter echoed around the grimy stone walls whenever the notion was mentioned. Until a sparkling

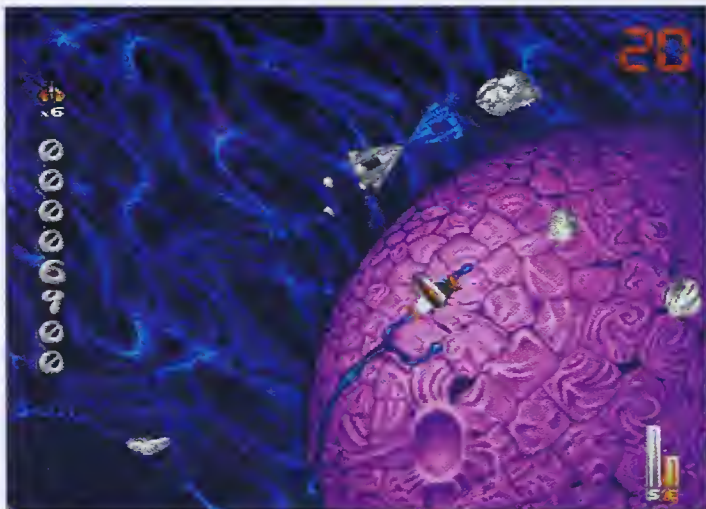
wraith-like figure descended from on high and spoke unto us.

"Yea", it said, "Cast out thy unbelievers, for Stardust shall come to the Atari and lead the people of ST to the promised land. For they are the chosen ones. Sorted." Can't argue with evidence like that, can you?

Stardust should be something of a lifesaver when it hits the ST. If it's even half as technically

impressive as the Amiga version then it will serve as a fine reminder of just how powerful the ST can be when used properly.

Next month, a more in-depth look at how the ST version will look and play, the first ST screens and, straight from the horse's mouth, programmers Bloodhouse talk about how they pulled off the cleverest bit of computer conjuring ever.



'OK, this is the Amiga version, first ST screens next month'

STARDUST

Asteroids enters the '90s with an almighty howl and a big pair of boots. It should be quite huge. So claims Daniel Whitehead in part one of a special preview. And he should know. He's an otter



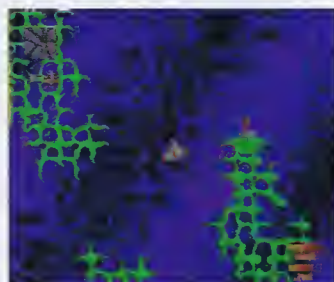
Choose a level



Masses of gorgeous weapons can be yours



Use the force Luke, I've lost Artoo etc



Woh, check out the bonus game, like mellow



It's not all asteroids you know

Starting out

The game begins as you stand looking at the beautiful view of Nantoonyt atop Vista Point. Look in the left binoculars for a "nice" view. You might also want to take a look at that wonderful plaque put there in your honour. Read it. Stop looking at the plaque, and go left, and you'll be in the right of the jungle.

A pointing finger will show you your way home. Go home, and get dumped by your wife. Then go back to the jungle and to the lower right where you should find another jungle area. Walk in a little bit and you'll change back to the Larry we all know and love. Go back home, look in the mailbox and get the credit card. Go back to the first jungle, then type in "Look Gronadilla" and be sure to pick up the piece of wood.

Go right again to the second jungle screen, then go to the lower right. A pointing finger will point you to your job. Go there, walk into the offices to the left, and have a nice "chat" with your boss. Walk back to the screen with the fountain in it, and then go down to the beach. A girl should be lying there.

Look at her and talk to her, then give her the card. She'll show you her appreciation! You'll get the knife she buys from the vendor. Leave and go to the fountain screen again. Now, sharpen the knife on the steps to the casina (on the right).

Carve the wood into the "statue." Go to the top left, back into the second jungle screen. Go up to the top right hand corner (you have to go around some bushes, and make sure you exit to the right, not the top) and you should be in the screen with Chip 'N' Dales in it. Cut the grass, and then weave it into a skirt. Now go to the right hand corner and exit right.

Go into the comedy hut and talk to the guys in the back left corner. Then go and sit in the chair in the middle table. Watch the entire routine, up to the duck impression because you'll get extra bonus points!

How to get the beach girl's \$20

Go back down to the fountain screen. Go right and move behind the steps.

This should put you in a screen with the cabana. Go to the left cubicle and put on the skirt. Head back to the beach and sell the statue to the girl who is lying there.

Now you have the \$20! Go back down and get her towel. Move Larry to the cabana and change into your leisure suit. While you're there, pick up the soap on a rope that's on the fountain which is in turn on the left side of the cabana. Go back to the beach and throw your towel to get a nice tan. But don't do it far too long otherwise you'll burn!



LEISURE SUIT LARRY 3



Re-released on budget and reviewed in this very issue of ST Action, Larry is back and we're not far behind with the complete guide to Sierra's superb lewd-and-crude graphic adventure

How to watch the dance show

Go into the casina (up the steps) and go straight far two screens, then left until you can't go straight anymore. Look in the mirror (far same extra points) then go left into the theatre lounge room. Give your pass to the ticket man.

He'll ask you some questions about it, the answers to which can be found in the manual. Now tip the man with the \$20 to get your front row seat. Stand in the lounge until Cherri Tart comes out to use the phone. Talk to her until she tells you she wants fond. Give her your fond and she'll tell you to come back when you get the deed.



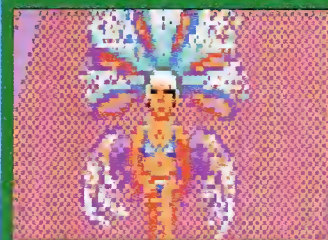
Where to get the deed



Exit the cosina, go left to the second jungle screen and then go to the upper right-hand corner. When you get to that corner, go up rather than right and you'll find yourself in front of the Law Offices of Dewey, Cheatem, and Howe.

Walk in and ask for a divorce. You'll be directed to Ms Cheatem who'll talk to you for a while and then send you out of the office. As you leave she'll tell you about the deed. Leave the office, then enter again, and Roger, the clerk will give the deed.

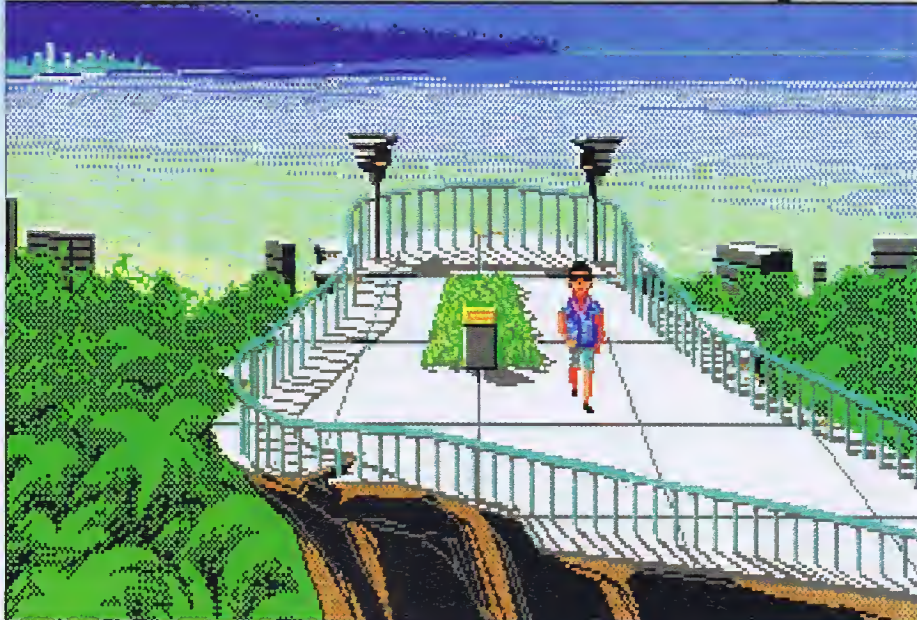
How to get the Fat City card



Go back to Cherri and give her the deed. She too will show her appreciation! Then, when appropriate, start to dance. Go back to the Law Office and pay for the divorce (give the money to Roger). You must be wearing the silly get-up for this. Suzi Cheatem will show her appreciation!

She'll tell you about the divorce papers, then leave the office and come back in. Pick up the papers from Roger. Look at the papers and you'll notice that they contain a Fat City membership keycard.

Score: 0 of 4000 Leisure Suit Larry 3



The start of the quest - and for some cheap thrills try looking through the binoculars!

What to do at Fat City

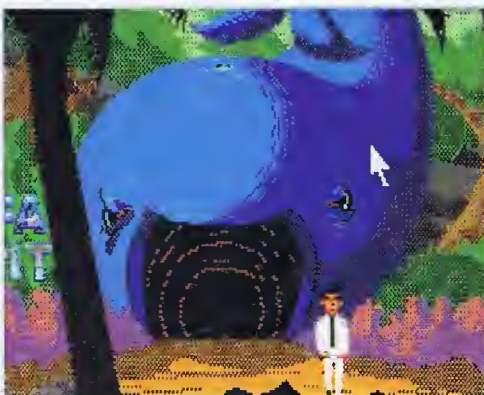
Go to the theatre lounge where you first met Cherri, and open the backstage door. Change back into that dapper suit of Larry's. Leave the casino and head back to the second jungle screen (one screen left of the fountain) and go to the lower left.

You should find yourself at the whale. Go into its mouth and go into the left door by using the keycard. Look on the back of the card you found, and you'll see three places which can be found in your game manual. Remember the page numbers of each of these places in order for this is the combination to your locker.

Your locker is, of course, locker No.69 and it can be found by typing in "find locker" until you are "burning hot!" Open the locker with the combination. Change into the sweats. Close the locker and go to the top right door and workout on all four stations. Do twelve of each and you'll find that Larry has turned into a stud.

Go back to your locker, unlock it, and remove your sweats. Close the locker again and go to the top left door. Take a shower (using the soop!) and when you leave, dry yourself off with the towel. Go back to the locker, use the deodorant and put on your suit. Close the locker. Leave the locker room and enter the top door with your keycard. Go up to Bombi and look at her. Talk to Bombi,

then help with her video problem. She too will show her appreciation! For extra points, go to the first jungle screen and go down and left. There should be a TV set, a newspaper on a table and a bench. Pick up the newspaper and read it.



How to get off of cliff No.2



After the hose breaks you should find yourself on a mini-cliff with some marijuana growing on it. Take the marijuana, and make a rope out of it. Climb up the tree and get the coconuts. Climb down. Throw the rope at the rock on the other side and tie your end to the tree.

You won't get across without a harness, so rip your dress and then climb the rope to the other side. Carefully make your way across the cliff and exit on the upper left-hand side.

What you need as Patti



First thing you need to do is get that wine bottle off the tray. Go behind the screen and put on your panties, bra, pantyhose, and dress. Head off to the piano lounge (where you met Larry), get the magic marker and the money off the piano.

Go to the cabana screen and fill the bottle full of water from the fountain. Now go to Chip 'N' Dales. Pay the man at the door, walk inside, sit down in the chair, and enjoy the show. When Dale comes by after the show, call him and talk to him. Ask him for help, but he doesn't really give you any. Get up and leave.

Go to the right of the comedy hut screen, then to the upper right near the bamboo. You should find yourself near a cliff. Go into the bamboo at the upper left and you'll find yourself in a bamboo maze.

How to make Patti happy

Go to the Chip 'N' Dales screen and go into the cave on the left. Pick up some of the flowers near the edge of the cliff. Make a lei out of them. Go back into the casino, go up as far as you can, and this time go right instead of left.

Go right past the mirror to the piano lounge where Patti should be. Look at her, talk to her, show your divorce papers, give her the lei, and type in "go to room".

Beating the pig

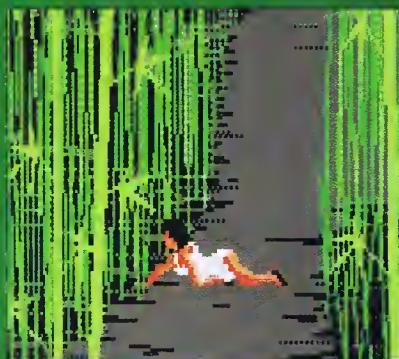
Carefully make your way up, but stop when the pig gets in your way. Remove your bra and put the coconuts in them, then swing your bra and hit the pig with the coconuts. Now the area is clear, go up to the river.

How to cross the river

When you get to the river, swim in a little and look where the water is moving. Type in "look in bushes" and pick up the log. Push the log out into the water and climb on it. Save your game now, as you'll be playing a mini-arcade game.

Dodge the rocks and stuff as they came by, saving periodically whenever you get same distance. Finally, you should make it out alive.

Once out of danger you'll bump into the lesbian amazons! They'll take you and put you in a cage with your lover Larry. Talk to Larry and have a good laugh around. When you've finished, draw a door with your magic marker. Now get out of the cage.



How to get off cliff No.1

When you exit, get as close as you can to the edge of the stream and drink. Go up and type "remove pantyhose" and you'll receive 15 points. Get close to that big rock at the top of the screen, then tie the hose to the rock and you'll be able to lower yourself down the cliff.

Score: 2 of 4000

Leisure Suit Larry 3



Larry wanders over to his house to find his wife sharing a bath with the woman from next-door. Ooer!

How to get the bottle of wine

Patti wants some wine. Go to the comedy hut and there should be a bottle on the middle table. Get it, go back into the casino, but when you get in, go right instead of forward. Press the button on the elevator and when inside press the nine button. Pour the wine, and this time she'll really show her appreciation!

The final section

You've now fallen out of the game and find yourself back in the Sierra back lot. Exit to your right and then go to the right again. When you get to the anti-grav machine, simply shut it off when you are upside-down near the switch. Then go to the right and watch the ending to the game!

Welcome once more to the definitive guide to all things with cannons and fodder. Part four concludes the guide and works out much better value for money than buying the book



CANNON FODDER

MISSION 8, PHASE 1

Jungle warfare is the next mission in our campaign men. Hidden around the jungle in South America are lots of army operatives that need to be wiped out.

The enemy have learnt from their past mistakes and are now taking more caution than ever before. They have set more booby traps and increased the capacity of the barracks to same extent. Your overall mission is to find 'em and drill 'em. Details are as follows.

The chopper will fly you in close to the nest. Move with stealth through the jungle avoiding point one. Inside this bush is a single soldier who will attempt to shoot you with a bazooka shell. Fortunately for us he doesn't quite know how to use such hardware and will no doubt kill himself in the process, but be sure not to leave any of your men near the explosion, as you well know it can kill you.

Area two contains a group of three crack soldiers who will keep watch until they have spotted any enemy forces. Then two of them will rush forward and attempt to thwart your plans while the third will raise the alarm.

So move quickly and kill them and attack the guard at point three before destroying the huts beyond at location five.

Take care near point four. The bridges have been tampered with and have a multitude of hidden mines and spiked traps. If this area has been successfully defeated you can move up to point six to wipe out the remains of the enemy forces in this area.

Although tempting, area seven contains a large amount of missiles to use against the enemy, if you choose to collect these before completing the other objectives you'll raise the alarm too early and enemy forces will be overwhelming for your much smaller group.

Although this phase appears to be easy I can tell you now that you have never had it so hard. Report to HQ when this mission phase is completed.



MISSION 8, PHASE 2



Enemy buildings are now reinforced with larger coatings of concrete and steel girders. Our rockets are unable to penetrate the outer skins so we need to employ bigger firepower.

Unfortunately we can't carry that sort of weaponry around with us. Thankfully the enemy has provided such weaponry, and it's just a case of getting to use it.

From the start point, shoot the guard at the top of the nearest building then make the squad retreat behind the wrecked buildings. From here send one man out to dispose of the guards at points two, three and four and use any rockets that you need but make sure that you save at least one.

Move towards bunker five but stay close to the shore line. Your aim here is to get rid of the guard at point five. His job is to stop anyone crossing the river and he will do so with his missiles.

The same applies to the man at checkpoint six. Things aren't easy due to the number of enemy bunkers and there'll be a lot of soldiers running around so make sure that you keep your distance.

In area seven there are a few guards to take care of. Try to do your best and kill them all, but under no circumstance enter area eight without disposing of these guards first.

All that should remain now are the enemy bunkers and the hundreds of soldiers that they emit. Use the turret gun to destroy these bunkers in area eight.

Make sure that when you enter it no soldier is on the island with you as he will throw a grenade and ruin your chances of success. The chopper will be waiting on standby for your signal. Good luck - you'll need it.

DER

MISSION 8, PHASE 3

Moving deeper into the jungle, we can see the enemy has a very impressive camp in the south-western corner of this map. The huts are much larger than before and they hold at least four times as many men.

To add to the graving problem of the enemy and their resources, they have set up loads of traps for our brave lads. Points one to four are by far the worst.

The first three are invisible spear traps, if you study the darker areas a little closer you'll just about see them, try to move around them.

At point four you'll see a small white thing in the grass. This is an enemy mine and must be de-activated if you are to pass through safely.

At point five you'll encounter your first enemy. Just shoot him from your side of the river bank then swim across to his side before proceeding to guards six and seven.

When attacking the collection of buildings in area eight you'll need as many men as you can muster. The enemy will be made frantic by your presence and will stop at nothing to destroy you.

You can guarantee they'll hurl grenades and attack from all sides, so keep your men on the move and destroy the huts' doors as quickly as possible.

It is very unlikely that all your men will survive this as it is incredibly dangerous. We hope that you all return safely.



MISSION 8, PHASE 4

Things get a little relaxed now or so it seems. The enemy have more secret concrete bunkers in the forests which need to be taken out for good.

Once again we have to rely on the enemy to supply us with sufficient firepower to complete the job. And the same problem applies: getting to use it in the first place.

From the starting point, move slowly down the map towards point one. Here you'll spy an enemy jeep. Use a grenade to remove this vehicle.

Then down to point two. Arm your rockets and get ready to remove the bazooka lookout situated on top of the bunker's roof. This done, move out to point three where a small hut is located. This must also be demolished but watch out for the small patrol covering this area.

At point four you'll find a civilian hut that needs to be destroyed and the missile guard that protects it. If any civilians are found roaming these parts they too must be eradicated.

To the north near the hut is a jeep ready and waiting just for you. You must climb into the jeep and drive it away from the building before attempting to blow the wooden structure apart.

Call the rest of your team over to the jeep or drive the jeep to the rest of your party and get them all to go inside the vehicle.

Drive back down the map and get them to drive the jeep over the cliff face at point six. When the jeep lands safely in the water get everyone out as quickly as possible before the jeep explodes. Then take your team down to the civilian hut at location seven and destroy everyone and everything.

Move the squad back up to location eight and commandeer the large gun to help you blow apart the reinforced bunkers surrounding it.

Quick reflexes will be required for this delicate operation. Take care not to blow yourselves up in the frantic confusion. With all the bunkers destroyed, there only leaves one hut at location nine to destroy, a pretty simple task to complete considering what you've already done.



Subscribe to the top value



Subscribing to **Atari ST User** means you reap all the benefits of the exclusive treatment you'll receive as a subscriber, and you get to choose one of these great **free gifts** as well

So, you're wondering, what exactly is this exclusive treatment? It's a whole range of things that ensure you get your copy of Atari ST User without any fuss or effort. As a subscriber there are no worries about remem-

bering when the next issue is on sale. You can watch your favourite soap or have a lie in, because you won't be scrambling down to the newsagents. You'll be snug and warm, content in the knowledge that you are part of the select, because your copy of Atari ST User is reserved for you personally. Before the masses have even thought about their monthly expedition to the shops you'll have had your copy for a few days, delivered direct to your door, postage free.

Not only do you already know the latest news and gossip, but

Save 8% on cover price
* UK

ATARI ST USER SUBSCRIPTION ORDER FORM

Choose either a 12 issue or a quarterly subscription, which will start from the earliest possible issue

● I would like the following 12 issue subscription:

New	Renewal		
<input type="checkbox"/> 9452	<input type="checkbox"/> 9453	UK Subscription	£39.95
<input type="checkbox"/> 9454	<input type="checkbox"/> 9455	EU Subscription	£54.95
<input type="checkbox"/> 9456	<input type="checkbox"/> 9457	Rest Of World Subscription*	£74.95
<input type="checkbox"/>	<input type="checkbox"/>	Canada/USA**	\$98

● I wish to pay by:

Cheque/Eurocheque/Postal Order payable to Europress Enterprise Ltd

☐ Credit Card

Expiry Date

Card No.

● Tick which option you want:

- 9475 ☐ Premier Manager 2
 9363 ☐ Two free issues and a magazine binder
 9376 ☐ Alpha Data Mega Mouse and Logic 3 mouse mat
 9377 ☐ Mortimer

* Gifts are not available for Rest of World subscribers

** Canada & USA subscribers send to: Europress (North America), Unit 14, Bysham Drive, Woodstock, Ontario, NT4 1P1, Canada. Tel: 519-539-0200, Fax: 519-539-9725

☐ Tick this box if you do not wish to receive promotional material from other companies

● I would like a UK quarterly direct debit ongoing subscription
 9458 ☐ £8.49 per quarter (Complete the form below)

Quarterly Direct Debit Instruction

AUTHORITY TO YOUR BANK/BUILDING SOCIETY TO PAY DIRECT DEBITS

Name of bank/building society:

Address:

Name of account:

Your account no.

Sort code

Signature(s)

Date

Your instructions to the bank/building society:

- I instruct you to pay Direct Debits from my account at the request of Europress Ltd.
- The amounts are variable and may be debited on various dates.
- No acknowledgement required.
- I understand that Europress may change the amounts and dates only after giving me prior notice.
- I will inform the bank/building society in writing if I wish to cancel this instruction.
- I understand that if any Direct Debit is paid which breaks the terms of the instruction, the bank/building society will make a refund.

FOR OFFICE USE ONLY

Originator's Identification No. 8 5 1 4 1 2

Ref No.

Bank/building society may decline to accept instructions to pay Direct Debit from some types of accounts.

● Deliver my magazine to:

Name (Mr/Mrs/Miss/Ms)

Address

Postcode

Daytime phone no.

Send this form to: Europress Direct, FREEPOST, Ellesmere Port L65 3EA. (No stamp needed if posted in UK.)

guide to your Atari ST!

Take out a subscription and you can pick a winner

Choose one of these free gifts

- Two extra issues plus an elegant Atari ST User binder

Save
£13.93



Subscribe to **Atari ST User** and we'll send you a high quality, exclusive Atari ST User magazine binder. These specially produced binders will keep your magazines in mint condition, providing an excellent reference point, as well as keeping them stored away neatly. As well as this useful binder you also get two extra magazines. Your 12 issue order is extended up to 14 issues.

- Alpha Data Mega Mouse and Logic 3 Mouse Mat

Save
£18.99

The well known Alpha Data Mega Mouse has ultra high 260dpi resolution with opto-mechanical encoder. The reliable micro-switch buttons provide effortless finger-tip operation. You can have all this and a high quality Logic 3 mouse mat absolutely free when you subscribe.



SUBSCRIPTION HOTLINE FOR CARD HOLDERS

Tel: 051-357 1275

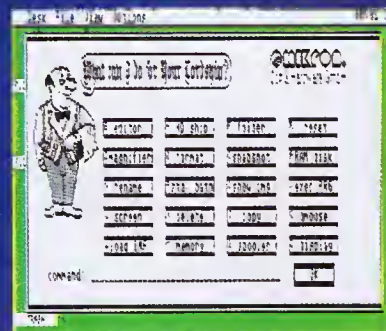
Fax: 051-357 2813

- **MORTIMER**

Save
£14.95

Mortimer is a multi-functional accessory for all Atari STs. It is a sophisticated program that has all these functions in one:

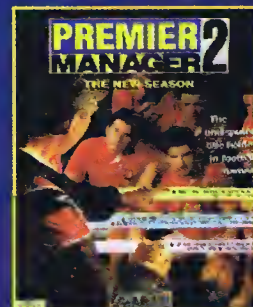
- text editor
- printer spooler
- keyboard macros
- virus guard
- flexible RAM disk
- snapshot
- disk functions
- pocket calculator



- **PREMIER MANAGER 2**

Save
£25.99

Premier Manager provided a strategy football management game with an accessible and enjoyable game style. Now Premier Manager 2 kicks off with a net full of extra features to test your skill and nerve to snapping point as you seek to build the club and team of your dreams.



Midi network games

After playing the Midi Maze II game which appeared on the February '93 issue of Atari ST User, I found myself interested in doing something similar.

However, I'm finding it difficult to get to grips with the code structure of such a multi-computer gaming environment as well as information on how best to access the Midi ports in such a program. Can you help?

F. Adams, York

I'm ofroid I turned up zilch in terms of info on this matter. So, I'm going to throw this open to anyone out there who has any experience with writing such multi-computer games.

Come on people, send in your answers and offers for help and I'll pass them on to Mr Adams

Games transfer

I have recently bought a 1040STE with 1Mb and I am very pleased with it. Your magazine is very good and the Advice Service which you offer is great.

I also own an Atari 800XL and still have a lot of software on cassette for this machine. Is there any way to transfer the software from the cassette to disk and use them on my ST, or is the language different?

Also, I would like to buy a second disk drive for my STE. Would this be a simple matter of just connecting it to my computer? If so, could you recommend a particular type?

P Willis, Cleveland

Good to hear you're pleased with the mag. I too still have on 800XL in the loft some-

where. In fact, it's probably in the same box as my even older Atari 400 and its massive 48k memory!

I'm ofroid you can't simply transfer your 800XL software to on ST disk and use them. They would need to be re-written to work with the ST's different hardware.

Attaching a second drive to your STE couldn't be simpler. Just plug the drive into the socket marked Floppy Disk and owoy you go.

When shopping around, be sure to ask for a double sided drive. There are still single sided ones around which are not really supported these days.

Nearly all Atari dealers, such as Lodbrooke Computing, System Solutions, Gosteiner, Power Computing and Silico Systems, to name a few, stock good quality external drives for between £45 and £60. Check out the adverts in this issue.

There are also various models of drive which feature extra hardware, such as Gosteiner's Power Drive, which contains the Blitz hardware. This hardware significantly speeds up disk copying.

Get DAT backed up

I have a rather large SCSI hard drive (250Mb) connected to my 1040 STE via The Link host adapter. I have been using this set-up for nearly a year now and have not yet had a problem with data loss (he says frantically looking for a wooden surface to touch).

After speaking to a friend who has suffered a 50Mb hard disk crash, my paranoia has finally got the better of me and I decided to splash out on a backup device to protect my valuable data.

The one I bought is a second hand SCSI DAT tape, which was put together by a computer engineer. The actual DAT mechanism is by Wang.

I now require appropriate software that will enable me to use the DAT drive to back up my hard drive. Can you suggest some suitable software for this?

R. Stannon, Scotland

In this very issue we have a review of Diamond Back 3 from HiSoft. I doubt if you can find any other software which is as easy to use and as fast as this package. One of its major features is the support for

Advice

Amstrad connection

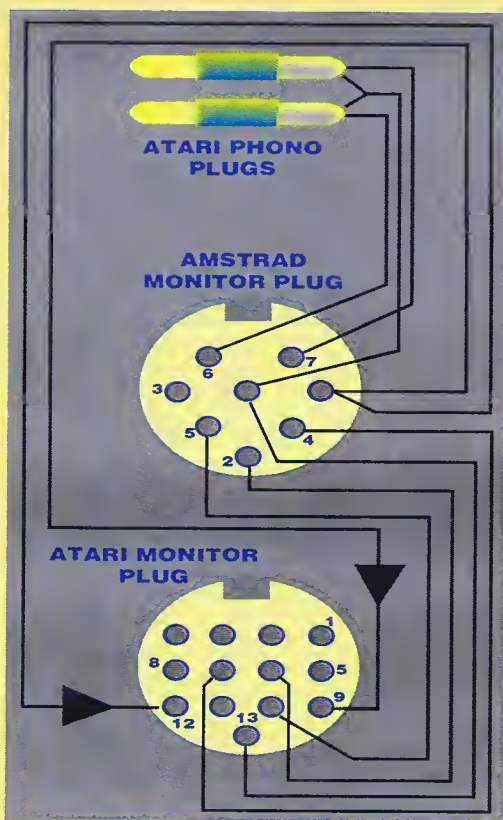
After much experimentation, I have managed to get an Amstrad CM14 stereo colour monitor (supplied with Amstrad's 464 Plus computer) working with my STE and would like to share this knowledge with your readers.

May I also take this opportunity to say what a great mag Atari ST User is. I have been reading it since issue 5 and have always found it entertaining and informative. Keep up the good work.

A. Brown, Herts

What a nice mon. Many thanks for your Amstrad info, Mr Brown. I get frequent letters requiring information on how to connect foreign monitors to the ST.

Remember, if anyone out there has hints and tips as good as this, write in and share them with us.



many forms of backup devices, such as floppy disks, tape streamers and DAT drives.

Check out the review and if you think it fits the bill, give HiSoft a call on 0525 718181

CD-ROM connection

I have a SCSI CD-ROM which I wish to connect to my 1040STE computer. Is it possible to do this and if so, what extras will I need?

P. Bailey, Glasgow

The first thing you will need is ICD's The Link, available from Lodbrooke Computing, or System Solutions' Translator. Both are hardware SCSI adapters that allow you to connect SCSI devices to the hard disk DMA port on the back of your computer.

Once you have the CD-ROM connected, you will also need suitable software drivers to handle the communication between your computer and the CD-ROM hardware.

MetaDOS is driver software from Atari currently available as public domain. However, it's not exactly stable and has some trouble reading files, causing them to appear corrupted after having been copied to a hard or floppy disk.

ExtendOS, from System Solutions, is an extension of MetaDOS and is much more reliable. You can contact them on 0753 818816.

Save that screen

I use an Atari 1040STE which I use for word processing and DTP. I have a number of screen savers to protect my monitor from "burn-in" but they are very boring.

While visiting a friend, he showed me the screen savers available for his PC. I was amazed. Many were shareware packages and some were commercial, costing up to £50!

They make the screen savers for the ST look dire with their animations and even digitised sounds.

I know the ST can't compete with a high resolution 256 colour VGA or SVGA screen, but I would think that the ST can handle animation and digitised sound.

Are there any screen savers for the ST which do more than simply change the colour of the entire screen?

L. Stevens, Southampton

You'll be pleased to know that there are screen savers which offer more than mere colour changes.

Before Dawn, written by Arne Rudolph, and Dorklord, by Steve Pedler, are both fine examples of modular screen savers.

SERVICE

They are modular because the actual screen effects are program modules which are loaded into the main screen saver application. This allows people to write their own modules, which can do more complex things than just change screen colours.

Of course, you must realise that the price for this is that they take up more memory than a simple screen saver.

Both Dorklord and Before Dawn come with example modules with more and more being written by third parties.

Check out your local PD library for details on how to get hold of them – and remember, if you like them, be sure to send off the requested registration fee to the author to encourage them to continue development.

PC games please

I have been told that because Falcon graphics can provide the same screen mode as the PC's VGA mode (256 colours in 640 X 400). It should be possible to play PC games on the Falcon using a PC emulator.

I'm not sure about this as I'm not familiar with how screens are stored in memory on the PC and Falcon in 256 colour mode.

I'm familiar with the ST's "bit-plane" method of storing screens, but does the Falcon use this when in 256 colour mode? Please can you clarify?

F. Saunders, Herts

Although the Falcon's 256 colour mode looks the same as a PC's, their structure in

memory is fundamentally different.

The Falcon's 256 colour mode is arranged as bit-planes. As you are familiar with such a structure on the ST, you will realise that unlike a 16 colour ST screen mode, which has 4 bit-planes, the Falcon's 256 colour mode has 8.

The PC's screen is stored in memory in a byte-per-pixel format. This means that if the PC's screen is stored in memory starting at address 8000, then the colour of the first pixel is contained within address 8000, the second pixel's colour is contained in 8001, the third in 8002 and so on.

Most games programmers will probably tell you that the bit-plane method is messy to code for and is slower to directly manipulate compared to the PC's much simpler screen structure.

It is also a fact that the majority (if not all) PC games access the screen in this byte-per-pixel manner. A PC emulator would therefore have to constantly convert such screen accesses made by a game running under the emulator, to the Falcon's bit-plane method.

Obviously, this would drastically slow down the game, probably to a point where

it's just not worth the effort of creating an emulator to handle games.

Emulators are mostly used to run serious applications, such as word processors and spreadsheets, which don't require fast screen updates.

Before potential Falcon games programmers start to have nightmares thinking about the implications of a bit-plane structure for the Falcon's TrueColour mode, which means 16 bit-planes to contend with, fret not.

TrueColour screens are stored much the same as the PC's byte-per-pixel methods, except that it uses words-per-pixel due to the 32000 plus colours available.

Auto virus protection

Sometimes when I load a disk of PD programs given to me by my friend I get the message "Hello !! I am your personal boot sector Guardian" on the screen.

Strangely though, there is nothing in the AUTO folder, where I thought programs that automatically run are stored.

Where does this strange program come from, and is it really protecting me from a virus?

M. Price, Wiltshire

Don't bother trying to find that file on the disk. It's a bootsector program. An ST formatted floppy disk is divided into tracks and sectors. There are usually 80 tracks with each track usually containing 9 sectors. I say usually as there are PD formatting utilities which allow you to have 82 tracks with 10 sectors.

The first sector in the first track is known as the Bootsector. This special area usually just contains information about the disk's structure.

However, you can also store a very small program in the Bootsector which the ST will realise is a program and will run automatically.

Commercial games usually have a loader program stored here which loads and runs the game. Unfortunately, some very sad and lonely lammers decided that it would be fun to write programs which copy themselves to other

disks and eventually destroy programs on the disk by erasing the entire bootsector.

Hence the virus program was born. The message you are getting is created by FastCopy Pro, a commercial copying utility written by Martin Backshot.

If you get the Guordion message, you are supposed to be free of a virus, due to the fact that the Guordion sits in the only place a virus can be.

However, virus coders are a silly lot and it wouldn't take much for a virus to display the same message as the Guordion program, while actually copying itself to other disks and eventually trashing everything. So beware.

Got a problem?

Are you at the point of taking an axe to your ST? Do you want to pulverise your printer? Well just count to ten and relax. Then, jot down the problems you are having, along with a detailed description of your setup.

Include information on the type of ST you have, the TOS version (if known), what peripherals are attached and any extra hardware that lurks inside your computer (accelerators, graphics cards and so on) and I'll do my very best to come up with a solution.

For those who have had problems and overcome them, chances are that someone somewhere is having the same problems and would benefit from your advice.

So get in print and send any tips or suggestions that other users may find helpful to: Darren Evans, Advice Service, Atari ST User, Europa House, Adlington Park, Macclesfield SK10 4NP

Don't miss...

THE 1994

Bristol & London

ATARI SHOWS

Sponsored by

ATARI
ST USER

&

ATARI ST
REVIEW

...on July 30/31

Come along to the only Atari specific shows in the country. You'll find all the leading ST publishers and dealers there, offering all sorts of bargains. This is your golden opportunity to buy virtually anything for your ST, with expert advice to hand.

Organised by David Encil,
Neal O'nions and Ray Cross

PRIZE DRAWS

There will be three prize draws at each show (11am, 1pm and 3pm), for a £25 voucher to spend at the stand of your choice on any item...

BACK ISSUES

If you've been following a series and missed the last one, or you were looking forward to the next issue but can't find it at the newsagents, you'll know just how disappointing it is to miss out on an issue. Well, never fear! You'll find various back issues on sale at bargain prices at the show.

SPECIAL SHOW SUBSCRIPTION OFFER

Guarantee your copies of the best Atari magazines by taking advantage of the special show subscription offer, only available to visitors to the shows. It'll only take a few minutes to fill in a form and you'll have every issue delivered postage free to your home.

THE LATEST MAGAZINES

Save yourself a trip down to the newsagents and make a beeline for the Go Direct stand instead. You'll be able to pick up the latest issues of Atari ST User and Atari ST Review at the shows, before they will be on sale in the shops!



FOR MORE INFORMA

Who's there

The leading ST publishers and dealers attending include:

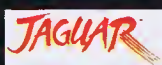
- Atari Workshop – renowned as the ST hardware specialists. They've promised to bring along enough hard drives so that they don't sell out this time! Also, see Cubase Audio here.
- Best Electronics – all the way from the US of A! Mr Atari, Brad Koda, will have every spare part imaginable along with some delightful Atari memorabilia.
- Black Scorpion – your first chance to see their latest product, Dextrous.
- Calamus User – all your questions about the best-selling Atari DTP package answered.
- Caspian Software – play the new Rock 'n' Roll Clams game!
- CGS Computerbild – Digital Arts' number one international distributor! DA's Layout, DA's Vector Pro, DA's Picture and all the rest...
- Compo Software – the biggest Atari specialist apart from Atari itself. Compo expect to have That's Write 3, That's Address 2, MusiCom 2, TrakCom, NeoDesk 4 and lots more – including upgrades for your computer carried out on the spot!
- Furst – see the revolutionary SMS2 operating system first hand.
- Go Direct – get back issues and the latest copies of the magazines here along with all of ST Review's cover disk support products. You can even meet ST User's editor!
- Goodman International and Merlin PD, two of the top Atari public domain libraries.
- HiSoft – check out Papyrus, Truelmage and the MasterPhone Falcon voice mail package at the London Show.
- JCA Europe – see Calamus and the stunning new Falcon-specific Rainbow art program at London.
- Titan Designs – it's rumoured that there will be stocks of the Graffiti Genlock available...

WIN A JAGUAR

Yes, not only will you get the chance to see and play on Atari's mind-blowing new games console, you'll also get the chance to win one!

Everyone who comes to either the London or Bristol Show will be able to enter for free! All you have to do is play a game of Obsession, a brand-new STe-only pinball game. The highest score at the end of the two days will be presented with a fabulous Jaguar!

Co-sponsored by ST Handbook and Europress Publications, this really is the offer of the year – and the perfect reason to come to the shows.



HOW TO GET THERE

BRISTOL SHOW - HILTON INTERNATIONAL HOTEL (0272 260041), REDCLIFFE WAY, BRISTOL, SATURDAY JULY 30, 10AM TO 5PM.

- Exit the M4 at Junction 19 and take the M32 to Bristol
- Turn left at the last set of traffic lights on the M32
- Under the underpass, carry straight on until you reach the flyover
- Do not go over the flyover but keep it to your right
- Bear right immediately after the flyover
- Follow the road round and the hotel is just on your left

LONDON SHOW - NOVOTEL (081-741 1555), 1 SHORTLANDS, HAMMERSMITH, WEST LONDON, SUNDAY JULY 31, 10AM TO 5PM.

- Underground – go to Hammersmith via the Metropolitan, District or Piccadilly lines and follow signs for Novotel.
- Road – aim for Hammersmith Broadway and follow signs for Novotel. Integral car park holds 250 cars.

Tickets

- Tickets cost £5, £3 for entry after 2pm
- Children under 16 are free when accompanied by an adult
- Atari ST computers free if being brought to the Compo stand for an upgrade!

TION PHONE 0487 3582

Sample CDs are the current buzz-word in computer music. The basic idea is this: You take a CD containing lots of recordings, or samples, of your favourite instruments and the like. You then transfer them into a sampler – a box designed to store them – and using your computer, replay them. It's a bit like having some new sounds added to your synthesiser.

But what if you can't afford the £1000 or so it costs to buy a sampler? Or if you don't even own a Midi keyboard? Is this new way of quickly distributing up-to-the-minute sounds lost to you?

Not if you think laterally – and own an STE or a Falcon. And you don't even have to be a serious, equipment-owning musician. Because by sampling from one of these CDs into your computer's memory and saving the samples to hard or floppy disk from there, you can plug your STE or Falcon into a hi-fi and compose things using its internal sound channels.

With sample CDs all the rage at the moment, Phil Morse looks at one which offers something a little different. Plus the latest ST music news and regulars

You'll need a sampler program – something like Stereo Master will do – and a reasonable amount of memory (2Mb upwards is ideal). A hard drive would be nice, but is not essential. You'll also need a sample CD.

Music company The Hollywood Edge are specialists in sound effects. Instead of giving you discs full of instrument sounds, they concern themselves with stuff like – and I quote – “helicopter blade thwop steady”, “phone rings (bell-type and slimline)” and “35mm still camera, multiple shots”. Sound

effects like these, all packed on to one CD and samplable into your STE/Falcon, have uses far wider than music.

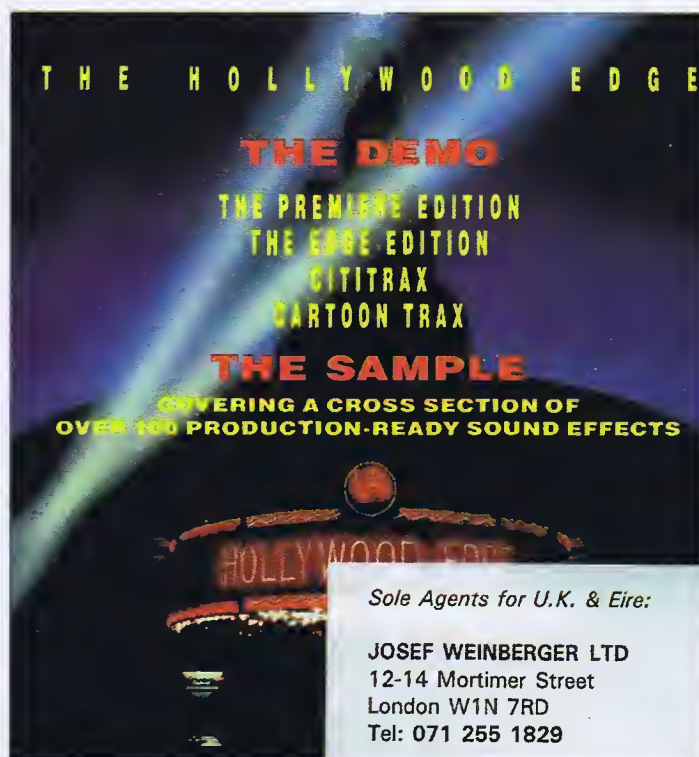
I'm sure you can see where all three of the above could fit into computer games, and they could also be used to create far more impressive demos than many, at least in the sound department.

The Hollywood Edge specialise

From

exclusively in such sound effects and have a massive library available. So next time you're after the sound of an apple being bitten or chewed, or a bullet ricocheting, why not check out one of their sample CDs?

● Hollywood Edge CDs are distributed exclusively in the UK and Ireland by Josef Weinberger Ltd, tel 071-255 1829.



This demo CD from The Hollywood Edge contains over 100 ready-to-use samples

Latest products

● It has been confirmed that Heavenly Music's new Desktop Music Division will supply complete music packages, including their own products in them for free! Top names featured include Yamaha, Roland and BCK.

The company have also expanded their highly acclaimed series of sample data disks for the Atari ST, and can for the first time accept credit cards. Their number is 0255 434217.

● Computers and music come together in the Interactive City - the subtitle for this year's week-long In The City music conference in Manchester.

Antony Wilson, ex-Factory Records boss, said: "We want to bring together all the key players – the hardware and software manufacturers and the international music industry."

The conference takes place in September, and a brochure can be obtained by phoning 081-747 9080.

● Do you find your instruments sometimes suffer from crackly leads, dodgy connectors or badly soldered plugs? Maybe it's worth investing in the real thing – quality leads and connectors built to last. VDC Cable Art offer the very best, and this year they've expanded their audio and video cable range immensely. Contact VDC on 071-284 1444.

A to Z of modern music jargon

acid house – A type of dance music dominated by the use of a now obsolete Roland bass-line synth, the TB-303, which lent the music its characteristic squelchy, spiky instrument sound.

analogue – Analogue more and more means non-digital. That means cassette or reel-to-reel tapes as opposed to DAT, old '70s keyboards against modern equivalents. While digital systems convert any sounds into a series of 1s and 0s (binary), analogue systems of any kind never do this. The debate over which way of representing musical data is the best is still raging.

auto-accompaniment – A common feature on home-use electronic keyboards and organs, and with composition-aiding software, auto-accompaniment describes the feature whereby the computer

"plays" the parts of other musicians while you take care of playing just one part. There are two Midi file formats – 0 and 1. Format 0 files contain all the Midi data in one homogenous track. This format is most often used with stand-alone Midi data players as the device has less work to do – it simply reads the stream of Midi data and plays it. Format 1 files have each Midi channel on a separate track. This is most convenient for sequencer users who may want to edit the parts. Some Midi data players can read format 1 files, but not all. You can prepare a file in your sequencer for playing on a data player as long as your sequencer can save format 0 files. If not, you need a format conversion utility of which there are two – Hands On's Zero Gen (£14.95) and Heavenly Music's MidiScope (£12.95). Both do the job simply and without fuss.

jets to jungles



The Akai S1000: A sampler is useful, but not essential in order to get into sample CDs

I am considering buying an ST and some music software in order to write songs for my band. My question is: How do you play live with an ST and your songs on disk, as it were?

How do you make sure you won't be kept waiting around in-between songs while you load up files and stuff? Is it feasible to use a computer to play live? Please help!

John Stewart, Carlisle

Phew! The simple answer to all of your questions is yes, it is all possible. Many companies have invented software and hardware to help.

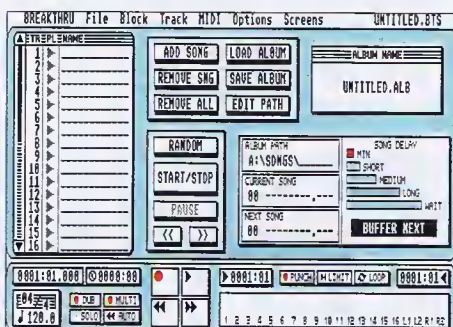
You can get little screens so you don't need a monitor with you; special disk-based sequencers so you don't even need your ST; and complex software such as Mind Over Matter's Slave Driver which allows a stunning (and stunningly complicated) amount of control over the music your ST is handling, while it is actually playing it.

But to avoid the most practical problem of having everything ready to shoot into the next song as the last one finishes requires less time, effort and money than specialised hardware or ultra-complex software.

Most modern ST sequencing packages have a multi-play or "juke-box" facility which loads up everything needed for the next song while the current one is playing. That way, all you have to do is press a button and the next song will start immediately.

ST live!

Send your queries, complaints or praise to Phil Marse c/o
Atari ST User at
Eurapress Publications,
Europa House, Adlington Park,
Macclesfield
SK10 4NP



The Juke Box screen in Gajits' Breakthru sequencer. Songs can be played in any order, missed out, rearranged – and all in real-time

Advanced Media Group

AMG's Matthew Wilkinson is a busy man. Running his hi-tech music company very much as a one-man band, he does everything from mastering CDs on £30,000-worth of equipment to answering the telephone and designing artwork for his product packaging!

The firm started seven years ago, and although they are probably best known today for their sample CDs, this side of the business didn't begin until around five years ago.

"We started off with one guy doing a sound card for the Korg M1 synth," said Matthew, "and we were getting them sold for us in America. Then the US company we were dealing with started selling CDs, and we started selling them for them in the UK."

Nowadays AMG do much more than just sell sample CDs – Matthew commissions what he wants, helps in sound selection, and then edits the noises before producing a master CD to send off to the duplicators.

Vince Clarke – one half of supremely successful synth-pop duo Erasure and ex-Yazoo and Depeche Mode member – is one artist who agreed to make a sample CD with Matthew. In this case Matthew spent a few days in an Amsterdam studio with Vince, got all the sounds onto DAT, got back to AMG's HQ (Matthew's packed apartment!), and after a bit more liaison with Mr Clarke, ended up with a CD full of noises the music world was gagging to get hold of.

"We don't really know whether our CDs are going to be any good until they're finished and being bought!" said Matthew. So how many can a company such as AMG expect to sell of each new title?

"We sell more and more of each new one we release," offers an enigmatic Matthew, "but 2,000 is a lot for a sample CD. If there were two or three of us we'd all be poor, but because there's just me..."

AMG have recently taken what at first seems like a retrospective move, in leaving behind a 3,000 square foot barn containing a full studio for the relative austerity of Matthew's flat. "We use professional studios now when we need to," offers Matthew, "and a massive barn with a studio seemed a little excessive for answering the telephone in."

So, streamlined and looking at what's coming out in the near future? Well, there's a new Norman Cook and Coldcut CD coming up, a rocky CD from Tim Farriss of INXS, and Gota – Simply Red's drummer – also has a CD coming out. We've got more releases planned than we actually have on sale!" he added.

● Contact AMG on 0252 717333.



Now!



The HiSound Producer Series
Over an hour of smooth
16-bit samples from:
JJ Jerzak
Pascal Gabriel
Golden
Norman Cook
Danny Cummings
Mitre Bould
David Ruffy
Neil Conti
Pete Gladwell
Ian Currow

AMG's catalogue
and demo CD

ST ACTION BACK ISSUES

These days *ST Action* is incorporated into *Atari ST User*. However, if you missed any of the original issues and their great CoverDisks, when *ST Action* existed in its own right, here's your chance to buy them. But hurry – stocks are limited.

ST Action Back Issues

Please send me:

- | | |
|---|--|
| <input type="checkbox"/> October 1993.....£2.50 | <input type="checkbox"/> April 1993.....£2.50 |
| <input type="checkbox"/> September 1993.....£2.50 | <input type="checkbox"/> March 1993.....£2.50 |
| <input type="checkbox"/> June 1993.....£2.50 | <input type="checkbox"/> February 1993.....£2.50 |
| <input type="checkbox"/> May 1993.....£2.50 | <input type="checkbox"/> January 1993.....£2.50 |

Name(Mr/Mrs/Ms)

Address

PostcodeDaytime tel no.....

Please allow 14 days for delivery. Make cheques payable to Europress Enterprise Ltd.
Send to Europa House, Adlington Park, Macclesfield SK10 4NP

Or phone Vicky on 0625 878888 (10am – 1pm only)
quoting your credit card details.



☐ Tick this box if you do not wish to receive promotional material from other companies



ISSUE: OCTOBER 1993
ON THE DISK: Zool demo and Hunchy 2010; an amazing full game, plus STA's disk mag



ISSUE: SEPTEMBER 1993
ON THE DISK: H-Mec, groovy pacman clone, and a zany collection of quality PD for you, plus issue seven of STA's disk mag



ISSUE: JUNE 1993
ON THE DISK: Critters (1Mb only), a full PD-style game; the Obscure Naturalist, a fantastic text based adventure, plus; issue 4 of STA's disk mag.



ISSUE: MAY 1993
ON THE DISK: Exclusive levels from Critters (1Mb only), and Super Caldrion, plus issue 3 of STA's disk mag.



ISSUE: APRIL 1993
ON THE DISK: Fast food, Easter eggstravaganza, plus; issue 2 of STA's disk mag; Freestyle!



ISSUE: MARCH 1993
ON THE DISK: Un-sensible Soccer – fruit meets football in this superb demo; plus Bonus, your very own pet, and issue one of STA's disk mag, Freestyle!



ISSUE: FEBRUARY 1993
ON THE DISK: Three explosive full games, plus a playable demo of the Codemasters' smash, Robin Hood



ISSUE: JANUARY 1993
ON THE DISK: Fully playable demo of Electronic Arts' platform stunner, Risky Woods

Don't risk missing your

ATARI ST USER

ATARI ST USER

Please reserve a copy of Atari ST User magazine every month until further notice.

- ☐ I will collect
☐ I would like it delivered to my home

Name

Address

Postcode

Hand this order form to your local friendly newsagent **TODAY** and he'll make sure you never miss out!

And a message from us to your newsagent: Atari ST User should be available from your local wholesaler. If not, contact the Circulation Department at Europress on 0625 878888.

One of the best things about Atari computers is that they are truly "plug-in-and-go": the operating system doesn't have to be loaded in from disk as it is built into the ROM chip and there is no complicated configuration or installation procedure to go through.

Just unpack your box, connect all leads and cables, switch on and the friendly GEM desktop is there to greet you. Run your application program and off you go!

So who needs utilities? Strictly speaking, nobody. It is quite possible to write an entire shelfload of novels, design a glossy magazine, keep track of your accounts or play lots of games without ever touching anything that could be described as a utility.

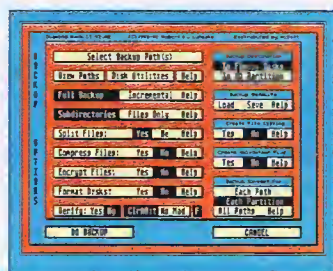
Between them, TOS and GEM will handle all the routine tasks encountered in a computing life: basic housekeeping (formatting disks, copying files), displaying text and controlling peripherals such as printers, modems and a variety of monitors.

POPULARITY

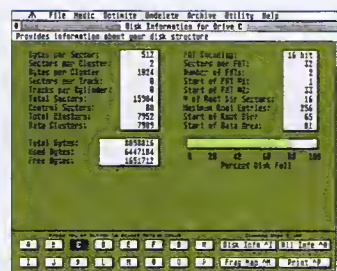
Yet everybody uses them. I have still to encounter an ST, TT or Falcon owner without utility software of some description: disk formatters and copiers, replacement file selectors and alternative desktops, picture and text viewers, screen accelerators, archivers, editors and ramdisks.

The list is almost endless and includes polished commercial packages alongside a vast army of public domain hacks and shareware offerings. Some, such as hard disk backup utilities, are extremely serious — all your valuable data depend on their reliability and efficiency — while others are little more than frivolous.

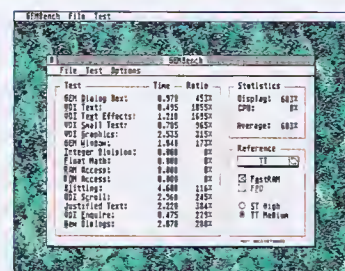
The reason for the popularity of



A backup utility is absolutely essential for hard drive owners, and Diamond Back is the best commercial one. Capable shareware alternatives are The Vault and Turtle



Diamond Edge, another "must have" for hard disk owners. It can perform all the routine disk maintenance tasks needed to keep your vital data safe and sound and speed up access to them



GemBench is particularly useful if you want to examine the effects of various hardware and software combinations are having on your system performance

What use utilities?

A new regular column is launched this month by
Günter Minnerup

utilities is simple. However well designed, an operating system and user interface entombed in ROM chips cannot easily be updated. It is "frozen" at a particular stage of its development, and inevitably someone will come up with further improvements on its built-in functions, or discover new ones which the original developers failed to cater for.

The classic example is that of the

Atari file selector in older versions of TOS. While doing the business for simple floppy drive setups with most files on the root directory, hard drive owners with several partitions and deeply nested folder structures would soon despair over its unwieldy and spartan file and drive handling. Before long, replacement file selectors became as essential to serious ST computing as a road map to driving.

Nor could anybody ever accuse TOS and

GEM of being speed demons. Atari's developers concentrated on reliability and compatibility rather than squeezing the last ounce of efficiency out of the available hardware, so they left a vast field of opportunities for clever hackers to give the machine wings. Once you have used NVDI, for example, returning to a plain vanilla ST will feel like walking through treacle by comparison.

HELPERS

Many utilities live in the AUTO folder, installing themselves at boot-up and working in the background without you being consciously aware of them. Others are desk accessories, ready to be activated from the Desk menu when required. The rest are ordinary programs, often kept in a special Utilities folder, and are started with a double click from the desktop.

The growing popularity of multi-tasking programs such as MTOS — itself, of course, a utility — opens up new methods of accessing the little helpers, whatever you happen to be doing at the moment.

The vast choice, however, creates its own problems. Which utilities are the right ones for your setup? What exactly can they do for you? Since the best utilities often drive the hardware to its limits, problems of incompatibility are

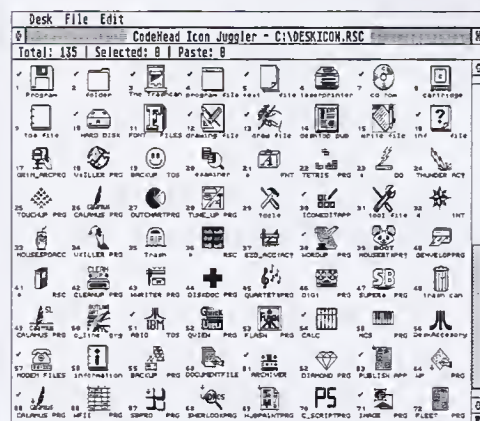
inevitable. Many a system crash is caused by conflicting AUTO folder programs or accessories, and some large applications have a distinct dislike of certain utilities such as replacement file selectors or graphics accelerators.

The documentation is sometimes a bit skimpy, especially with public domain utilities. Magazine reviews tend to concentrate on major new releases but rarely reflect long-term experiences of daily use.

Help is now at hand, however. This new column, the first of its kind in an Atari magazine, is dedicated to helping you make the most of your system by giving in-depth coverage and information of the type so hard to get hold of from other sources.

Many years of experience with Atari computers will be made available to you in the form of hints and tips for beginners, solutions to incompatibility problems, comparisons between different PD, shareware and commercial offerings addressing the same problem, and regular updates on new versions and releases.

In keeping with the interactive philosophy of *Atari ST User*, there will be a section taking up questions and queries from you, the readers. From NVDI to NeoDesk, the Universal Item Selector to Diamond Backup, Imagecopy to MultiTOS — this page is where you can find the answers!



The default icons supplied in Atari's desktop are unlikely to meet your needs for very long, but how do you add new ones? CodeHead's Icon Juggler can maintain different icon libraries and swap icons between them



A F WEAVER ENGINEERING

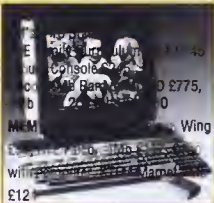


181a Brecknock Road, LONDON N19 5AB. Tel: 071 267 3308

THE ONLY ONE YOU'LL EVER NEED FOR

Upgrades, Repairs, Hardware for ATARI ST/FM/E & FALCON Computers.

JOYSTICKS Trackballs, Mice, Autofire Mouse Emulators, Leads, Switches



TOS UPGRADES 2.06 & 4.04
2.06 TOS + Switcher, Free Multitask AHDI CPX T64 for STFM, T68 for STE Official Compo Upgrade £65 Falcon TOS 4.04 £40

ACCELERATORS T28 £170, T36 £255, Eagle/Mighty Sonic 32Mhz 030 £170/£220

18M EMULATORS PC Speed £65, AT Speed £129, Falcon Speed £229

AUDIO We can supply almost anything!

DIGITAL INTERFACES

Sony/Philips £125

S01 £345

Adat £475

Midi Lead £5

8 x 16 Midi Multiport £205

SEQUENCERS, SAMPLERS, DIGITAL AUDIO

Concerto £35

Muscom II £45

Talcom £60

Replay 16 £130

D to D + 41/FX £295

D to D £32

Digitape pro £475

MONITORS True Colour Systems

14" Sharp remote 40 channel SCART RGB TV £165

14" Microvite: SRGB Multisync £295

Falcon Adaptors £10

VIDEO Blowup £12, Overscan £35,

Screen Blaster £69, Reflex £165

DIGITISERS Videomaster ST/Falcon

£70/£99, Vidi 12 £150, Screen Eye +

Plus Studio Photo £250

GENLOCKS Graffiti £153,

Multigen £350

DRIVES & SCSI SUB SYSTEMS

Power Blitz Turbo Drive £65,

1.44 Int. Upgrade £79

Panasonic/Sony CD Rom

Multisession dual speed £185,

Maxtor 290Mb £387, 345Mb

£467, 18M 1Gb "Spitfire" £877,

2Gb £1340, 4Gb £2795, Hewlett

Packard Dat 2 to 8Gb DDS £946,

4-16Gb DDS2 £1260, Magneto

Optical 1.3Gb £2189, Maxoptix

1.3Gb MO £2412

NETWORKING + COMMS

8io Data, Ethernet,

Power/Midinet, ST Stalker £34

SPARE PARTS + CONSUMABLES

All ATARI spares are available as

we are an Agent for the

ATARI DISTRIBUTION

CENTRE

Phone Now for our incredible prices and FREE advice on upgrades & expansions. Ask about our extended warranty service

PD WAREHOUSE

The PD WAREHOUSE has 1000s of disks in its catalogue, and most of them are only £1.35 each, if you'd like a copy of this printed catalogue simply send a 50p stamp, A4 SSAE or IRC and we'll do the rest.

We stock ACCOUNTS, ARTS, BUSINESS, EDUCATION, GAMES, MUSIC, PROGRAMMING, PUBLISHING AND MUCH, MUCH MORE

If it's commercial software you're after then please ask for a list when ordering, we'd be only too happy to send you our latest offerings. Telephone:

071 267 3308



PD Warehouse

Please note all personal callers must make an appointment before calling at our premises.

PD WAREHOUSE, 181a Brecknock Road, LONDON N19 5AB.

★ FREE ★ FREE ★ FREE ★

The A-Z of Public Domain, Licenceware & Shareware

Ring, write or fax for your
FREE copy today!

MT SOFTWARE (STU)

Greensward House,
Broadway, Totland,
IOW, PO39 0BX

TEL: 0983 756056

FAX: 0983 755800

Yes, our new printed catalogue is available now totally free of charge – simply ring, write or fax and we will rush a copy to you in the next post! For all the latest in PD plus incredible offers on commercial products such as Easy Text Professional, Beginners Guide to Stos, Mr. Smart's Big Time, Family Roots, etc. Order your copy today and join the 26,000 Atari customers who already use our service.

★ FREE ★ FREE ★ FREE ★

GFA-BASIC for Atari ST

Special Offers (while existing stocks last)

GFA-BASIC 3.5 Interpreter
GFA-BASIC 3.5 Compiler
GFA-BASIC G-Shell
GFA Assembler
GFA Basic and Assembler tutorial
GFA Raytrace

Special Price		Normal Price
only £20.00	<input type="checkbox"/>	£50.00
only £20.00	<input type="checkbox"/>	£30.00
only £10.00	<input type="checkbox"/>	£20.00
only £10.00	<input type="checkbox"/>	£25.00
only £10.00	<input type="checkbox"/>	£20.00
only £10.00	<input type="checkbox"/>	£20.00

Order **NOW** by post or phone, using VISA, MASTERCARD or cheque. Please add for postage £2.00 UK or £5.00 Europe.

Please make cheques payable to:

GFA DATA MEDIA UK LTD
BOX 121 Wokingham
Berkshire RG11 5XT

Tel: 0734 794941

Fax: 0734 890782



VISA/MASTERCARD Number

Expiry Date

Amount

Name / Address

Unless you've been down a well for the past few months, you can hardly have missed the launch of the Orange mobile phone network.

It's not just another mobile phone system like Cellnet and Vodafone because it's an all-digital network, with digital data efficiently transmitted at a frequency of around 1,800MHz. The voice channel is converted to/from a 14/16,000 bps data stream by the phone.

That's why Orange costs between a half and two-thirds less to use than Cellnet and Vodafone, not to mention the fact that the phones are a lot cheaper to call from BT and Mercury land lines.

The good news for computer users is that, this September, Orange will take the wraps off its mobile data service. Forget modems, you simply plug the serial output of your computer into a tiny black box (that formats the data for the Orange network), which plugs into the Nokiaphone.

For data calls leaving or entering

Orangeade

Steve Gold reports on the latest news and products in the comms world

the Orange network, Hutchison have installed a bank of modems at their Bristol headquarters that convert the digital data stream to/from a standard modem call.

Confusing? Not really, if you regard the Orange phone network as a packet data network like BT's Dial Plus or CompuServe's global data network.

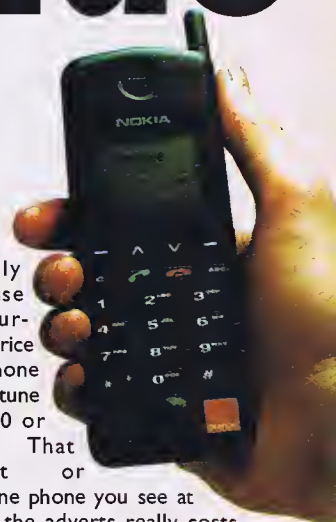
When the data service launches, it will mean real mobile datacomms at 9,600 bps. And, unlike Cellnet or Vodafone, there will be no prob-

lems with noisy radio channels. The Orange network is all digital, so any corrupted data packets will automatically be retransmitted.

Now the bad news; even though Orange is cheaper to use, its phones cost from £249 upwards. The reason is simple – there's no big fat commission paid to the dealer out of your line rental and exorbitant call charges on Orange.

On Cellnet or Vodafone's analogue networks, the commissions

actually subsidise the purchase price of a phone to the tune of £200 or more. That Cellnet or Vodafone phone you see at £99 in the adverts really costs around £299 – the same price as the Orange phone.
Orange: 0800 168168



BT get their act together

You won't find discount prices in your local BT phone shop, but you will find a new generation of multimedia 'kiosk' PCs instead.

These touch 'n' look systems allow you to browse through the technical specifications of all of BT's hardware and service offerings. The system is worth checking out, if only to familiarise yourself with the range of services that BT is offering. During the summer BT will be updating their kiosk systems with details of caller line identification (CLI).

CLI, which is being tested in parts of Scotland and in Bristol this summer, allows identification of who's calling before you pick up your phone handset. It will also allow you to automatically call back your last few callers without looking up their number. CLI will have a number of important ramifications for modem users in the next few years.

In the short term, it will allow you to bypass ID/password systems on some online systems, as your phone's CLI ID will allow you access to services, with the charges billed to your home or office phone number. In the longer term, it will allow intelligent call routing.

For example, suppose you're in Watford and dial the local Dial Plus access number to log into CompuServe. By sensing your phone's ID, the CompuServe network could tell you that it would be cheaper to dial direct to the main London CIS port. That's in the future of course, but it shows what CLI can do.



These terminals, found in BT shops, provide a wealth of techy information

Robotics restyle portable modems

Against a continuing onslaught from the battery-powered Pace Microlin and the recently launched Mobyfax modem (see story this page), US Robotics have revamped and restyled their Worldport series of modems.

And not before time. The Worldport modems were looking pretty much the same as when USR acquired New York-based Touchbase three years ago – boxy and less than stylish.

The new Worldport modems are available in two flavours – a £199; 2,400bps data/9,600 bps fax unit and a 19,200 bps data/9,600 bps fax version with cellular capabilities. Pricing on the higher specification Worldport will be announced when it ships later this summer.

Clive Hudson, USR's managing director, seemed surprised when I mentioned that his £199 modem was about to be undercut by Pace's Mobyfax. I suspect that he'll cut the price of the basic Worldport down to £99 before long, matching the Mobyfax.

US Robotics: 0800 225252

The new look
WorldPort portable
fax/modem from USR



Pace launch Mobyfax

Mobyfax is the unusual name for a new portable modem from Pace MicroCommunications.

Launched at the Networks '94 show in Birmingham in late June, the £99 modem is battery powered, works to 2,400bps data and 9,600bps fax, and comes with all the necessary cables to run the unit "out of the box," according to Dave Curl, marketing manager of Pace.

"We're also bundling comms software, and starter kits for the AlmacBBS and CompuServe online systems. At this price, we think the modem will sell to users who've never considered buying a modem before," Curl told me, shortly before the Networks show.

The unique selling points (USPs) for the Mobyfax are that it's portable and battery powered, comes with all the gubbins to use it out of the box, and matches the price of similar desktop modems.

Pace Micra Communications: 0274-532000US

COLOUR KITS for MONO PRINTERS

Ever wished you'd bought a colour printer instead of a mono one? Wouldn't it be nice to print out pictures in colour? Now you can with Atari "FlexiKolor Kit". Each Atari FlexiKolor kit comes complete with everything you need to print in colour, including superb software. The colour kit is simple to use, the ribbons fit exactly the same way as your black ribbons so it will not affect your guarantee. Also on all models listed below

paper alignment is automatic, you do not have to manually align. PRINTS AS GOOD AS COLOUR PRINTER. If your printer is not listed below please phone. Atari FlexiKolor kits for Star LC10, LC20, all Star 24 Pin. Panasonic 1080/81/1123/1124. Epson FX80, LQ100, LQ400, LQ800 etc. Citizen 120D+, NEC P6, P6+, Seikosha 1900+. Please note colour kits come complete with coloured ribbons. COMPLETE KIT £39.95

FLEXIDUMP PLUS 2

THE COLOUR SOFTWARE FOR YOUR COLOUR PRINTER

- ★ Total colour control
- ★ Balance control for picture enhancement
- ★ Select area to be printed
- ★ Select size to be printed
- ★ Page control
- ★ Colour sieve
- ★ Ink correction
- ★ Automatic poster mode for larger than A4
- ★ Gamma correction (fully adjustable and saveable)
- ★ Spooler for colour letterheads etc
- ★ Multiple copy control
- ★ Colour correction
- ★ Colour/mono catalogue function
- ★ Imports a large range of file types including (IMG) larger than screen size, tiny, Spectrum 512, IFF, Degas, Neo, IFF (Amiga), HAM (Amiga) yes you can even print Amiga pics.
- ★ Colour separation (Print colour on your Bubble Jet)
- ★ Dot pattern control
- ★ Pattern rotate
- ★ Ideal for T-shirt printing
- ★ Now with 'smooth' control, get rid of those jagged edges.
- ★ Large range of dithering (dot pattern) modes.
- ★ Run in any resolution, view, manipulate and print in any other resolution
- ★ Colour catalogue function will print a miniature of each picture configurable between 1 to 8 across
- ★ Will drive 9 or 24 pin Star, Citizen Swift, Panasonic, NEC, Epson, Canon, HP Deskjet 500C, 550C etc.

STOP PRESS
NOW AVAILABLE
FLEXIDUMP PLUS 3

STILL ONLY £39.95 inc

UPGRADE FLEXIDUMP TO FLEXIDUMP PLUS 3,
ONLY £14.95 inc. RETURN MASTER DISK

T-SHIRT PRINTING RIBBONS

PRINT ON NORMAL PAPER IRON ON T-SHIRT

4 Colour Citizen Swift	£29.95
4 Colour Citizen Swift (Reload)	£14.95
4 Colour Star LC10	£14.95
4 Colour Star LC200 9 Pin	£19.95
4 Colour Star LC200 9 Pin (Reload)	£12.95
4 Colour Star LC200 24 Pin	£29.95
4 Colour Star 24 Pin (Reload)	£14.95
4 Colour Seikosha SL95	£29.95
4 Colour Seikosha SL95 (Reload)	£14.95
1 Colour Citizen 120D/Swift	£11.95
1 Colour Star LC10	£11.95
1 Colour Star LC200 9 Pin	£11.95
1 Colour all Star 24 Pin	£11.95
1 Colour Epson FX80/LQ400/MX80	£11.95
1 Colour Epson LX80	£11.95
1 Colour Epson FX100	£11.95
1 Colour Panasonic KXP 1080	£11.95
1 Colour Taxan/Canon 1080A	£11.95
Heat transfer Pens 5 large red/orange/yellow/green/blue, Large pens have a marker size nib	£14.95 a set
Heat transfer Pens 5 small red/orange/yellow/green/blue, Small pens have a fine nib	£12.95 a set
"TRANSFERLAQ" for putting prints onto ceramic, glass, aluminium etc. (for use with T-Shirt ribbons and inks)	£14.95

This is only a small part of our range.
Please phone for other printer types

How to order: Enclose cheques/PO made payable to:
CARE ELECTRONICS or use Access/Visa

ALL PRICES INCLUDE VAT AND CARRIAGE
Order Line 0923 894064
CARE ELECTRONICS

Dept STU, 15 Holland Gardens, Garston,
Watford, Herts, WD2 6JN.

Tel: 0923 894064 Fax: 0923 672102

PRINTER RIBBONS

Don't throw away your plastic printer ribbon cases when the ribbon wears out. Just take the top off, take out the old ribbon and reload it with a new one. It's simple. Full instructions supplied. Black reloads from as little as 99p each.

COLOUR PRINTER RIBBONS

Reloads for:-

Star LC200 9 Pin 4 Colour (Normal Ink)	1 Reload - £5.99.....S Reloads - £23.95
Star 24 Pin 4 Colour (Normal Ink)	1 Reload - £6.99.....5 Reloads - £29.95
Citizen Swift 4 Colour (Normal Ink)	1 Reload - £6.99.....S Reloads - £29.95
Panasonic KXP2180/2123 4 Colour (Normal Ink)	1 Reload - £6.99.....5 Reloads - £29.95
Seikosha SL95 4 Colour (Normal Ink)	1 Reload - £6.99.....S Reloads - £29.95

Ink ribbons also available in Gold, Silver, Magenta, Orange, Purple, Brown, Green, Blue, Red for a wide range of printers.
Special re-ink for Panasonic printers, Star LC200 9-pin, Epson LQ100 black bottle will re-ink 100+ ribbons£9.95

NO MESS INK REFILLS FOR HP DESKJET PAINTJET AND CANON BUBBLEJETS

"CARE THREE PACK" will refill HP51608A Cartridge 3 times. The Canon BC-01/SJ48 Cartridge 3 times. Three Pack available in Yellow, Magenta, Cyan, Red, Blue, Green, Brown, Purple, Black £14.98 each.

"TRI-COLOUR PACK" 3 refills of Yellow, Magenta and Cyan £17.95.

"CARE SIX PACK" will refill HP51608A Cartridge 6 times. The Canon BC/01 Cartridge 6 times.

6 PURE BLACK REFILLS ONLY £24.95
Please state type when ordering
Print Head Recovery Fluid for unblocking inkjet/bubblejet cartridges, 18ml bottle £5.95

ST Handbook ST Products

ISSUE #3 IS OUT NOW!

Have you read the latest ST/E magazine yet?

If not you're missing out and getting left behind. The very best mag available for P/D and Shareware, stories, articles, news, reviews, competitions, charts, and lots lots more!!

ONLY £2.50 (inc P+P)

The latest paper based magazine, comes complete with a free

Cover Disk

Full of games and utilities, this issue is a real blockbuster, order your copy now from us direct or from participating Public Domain Libraries.
(check Atari press for details)

Please make cheques/postal orders payable to:

WRIGHT & HAYES GRAPHICS

Send your order along with payment to:

Wright & Hayes Graphics,
1 Fordhouse Lane, Stirchley, Birmingham, B30 2NH.
TEL: (021) 459 4340

CALAMUS 109m	Only £59.00	DDDS	10 Only	£3.50
(Minimum req/1 meg/mono monitor)		DDDS	50 Only	£16.00
CALAMUS SL	Only £199.00	DDDS	100 Only	£29.00
(Minimum req/2 meg/Hard drive/mono monitor)		DDDS	250 Only	£67.50
CALAMUS FONTS PACK	Only £14.95			
(10 disks)				

OUTLINE ART V.3	Only £199.00
RAINBOW PAINT (NEW) (Falcon)	£29.95
DEGAS ART TUTOR	Only £8.99
EASY TEXT PROFESSIONAL DTP	Only £35.95
(1 meg minimum)	
EASY TEXT VECTOR	Only £36.95
(2 meg min/h-drive)/mono monitor	
EZ-ART PROFESSIONAL (NEW)	Only £29.95
EASY STITCH (NEW)	Only £15.95
FAMILY ROOTS 2 (NEW)	Only £29.95
MR SMART'S BIG TIME	£24.95
BEGINNERS' GUIDE TO STOS	£32.95
(618 page ringbound manual & 2 disks)	
STARK RAVING BONKERS	£8.99
(Cobbledick latest)	
SPECULATOR	£9.99

WE ALSO STOCK HIGH DENSITY DISKS

WE STOCK INKJET REFILLS

Sponsors and Promoters of the Games Challenge to be held at London and Bristol Atari Shows July 30-31 - See press for details

HERO - Human Extraction and Rescue
Operation coming to a monitor near you soon

See us at the official Atari Shows and enter the Games Challenge

With a good masthead, attractive grid and a sensibly chosen body typeface, your newsletter should be starting to look polished and professional. All that remains, once the text is roughly laid out on the grid, is to add a few headlines and then start the process of tidying it up.

This can sometimes take longer than any other stage – on a four-page newsletter, the slightest change to one story can have quite an effect on others. Add a cross-head, for example, and a story may have to reflow through dozens of frames, particularly if you have imported the text as a single file. This should be avoided – always import each story individually or in groups as a few extra minutes spent doing it this way will save hours of tedious adjustment later.

INVITING

Once you have an idea of where each story is going to be, it's time to start thinking of how you're going to make it look inviting to read. There are dozens of what are commonly called reader cues – headlines, cross-heads, pulled quotes and various graphic devices – that act as road signs on the journey through the newsletter. They point to the start and end of stories, help split them into manageable chunks, highlight the contents and reinforce the overall message. Unfortunately they are almost always under-used.

Headlines are an obvious example of reader cues and, while always used, not enough attention is paid to them. The words can be very important – as editor you must improve on them wherever possible. If nothing else, the headline "JOHN SMITH WINS COUNTY DISCUS CHAMPION-

Taking your cues

Andrew Wright rounds off the newsletter series with some reader cue techniques

SHIPS WITH RECORD-BREAKING THROW" will fill up a bit of space but "DISCUS RECORD SMASHED AS SMITH TAKES CUP" is a little more interesting.

Headlines need to be large to make them stand out from the body copy but fancy display fonts should never be used and lower case is generally better than upper case. Pay strict attention to kerning, particularly in 20 point text and above.

Cross-heads, otherwise known as subheadings, are used to break up long pieces of text. They have a dual purpose in that they serve as an anchor point for the eye and

help convey to the casual reader, or someone simply scanning the pages, what the story is about.

If a story isn't finished at the foot of a page, make it obvious where to go next. Use a jump line such as "Continued on page x". Don't forget continuation headings either if stories are restarted over the page.

Department headings can be used to group items together or tag an article's subject. For example, an article entitled "Bidding a slam" in the accompanying bridge club newsletter has a department head across stating "BETTER PLAY" in

reversed-out lettering. Pulled quotes are seldom used, which is a pity because they are a very effective way of attracting readers to an article – if you choose the right quote, that is. If we were to choose one for this page, it might be "Reader cues... act as road signs on the journey through the newsletter", a quote that sums up the thrust of the article.

Dropped capitals, often called drop caps, can be good for starting articles. They are fiddly to set up but invariably enhance a newsletter page when used sparingly.

STAND OUT

Placing a well designed table of contents on the front page of a newsletter can often invite further inspection – it may not otherwise be obvious to some casual glancer that the inside pages are just what they want to read! It has to stand out prominently and should either be at the side or centred at the bottom. The use of rules and boxes is recommended, along with page numbers that are larger than usual.

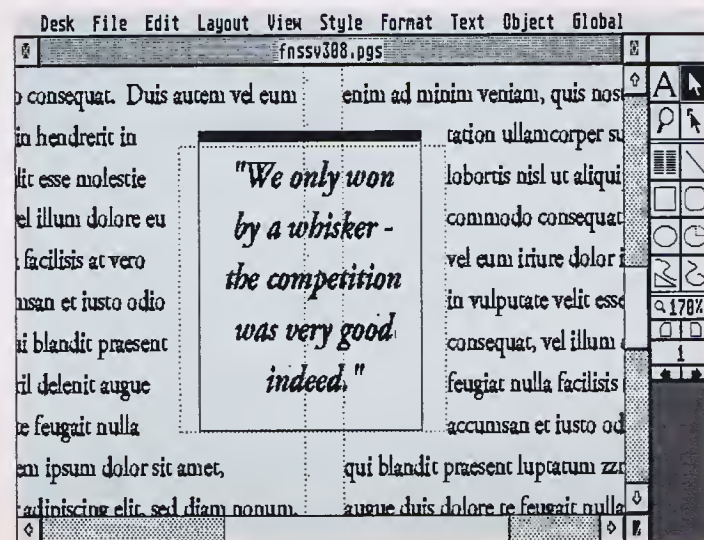
One thing to avoid is too much space between title and page number – close them up or make the numbers even larger.

Graphics should be used carefully. If you think of your newsletter as a cake, you should treat graphics not as the cake, the filling, nor even the icing, but the little coloured balls that are often sprinkled on top.

Restrict clip art to one per page, if you feel you must use it at all, and use boxes, rules, lines and fills very, very sparingly. It's no use spending several hours adding reader cues that enhance readability only to douse the pages with graphics and distract the readers' attention.



Use every trick you can to make a newsletter interesting to look at and read



Pull quotes are a good way of attracting the reader's attention



**ON
SALE
JULY
5TH**

ATARI REPAIRS

Repairs undertaken to Atari computers at £49.95 inclusive
of parts, labour, VAT and return postage/packing

Full technical support

Computers repaired in the quickest possible time

All machines will be overhauled with a full soak-test to ensure optimum reliability

Entrust your machine to the experts, full 90 day warranty

Repairs to disk drive and power supply also included
(extra charge possible if found to need complete replacement)

Repairs to other Atari systems undertaken - phone for details

Upgrades and expansions supplied and fitted - phone for details

£49.95

To take advantage of this exceptional offer, simply send or hand deliver your computer to our workshop complex,
address details below, enclosing this advertisement-voucher, payment, fault description, return address,
along with your daytime and evening telephone number and we will do the rest.

Should you require Group 4 Security return delivery, simply add £5.00 to the repair charge.

COLLECTION SERVICE AVAILABLE



WTS Electronics Ltd Chaul End Lane Luton Bedfordshire LU4 8EZ Tel 0582 491949 (6 lines)

(We reserve the right to reject machines which, in our opinion, are beyond repair- Normal charge applies)

A customer returns the goods which you have supplied him or her, for what you consider to be a spurious reason, and demands a full refund.

The seemingly friendly, welcoming couple who invited you around to discuss installing a new kitchen for them decide to cancel – after you have drawn up detailed plans and placed an order for units which cannot be undone.

A person you know from past experience to be a troublesome customer threatens to report you to “the authorities” for refusing to sell to him/her.

What do you do in these situations? Is the law on your side, or could you be involved in expensive legal action?

If so, even if you win, the time and possibly the expense involved could have a catastrophic effect on your business.

Many small businesses make the mistake of thinking it won't happen to them, or that trying to pre-empt such problems is a waste of time.

CLAUSES

The chances are, something like this will happen to you sooner or later. The business that has taken the trouble to produce a fair and reasonable set of terms of trading will be the least likely to be caught out.

The advantages of setting out your terms and communicating them verbally, by way of a notice, or on paper, to customers are enormous.

First and foremost, it will mean there are no vague arrangements, the customer realising from the start that, for instance, a deposit representing a percentage of the total cost of an item or job is required at a certain stage, that cancellation of a contract after a certain time means a deposit cannot be returned, and that goods or services will be provided on a particular date, or within a particular timescale.

Remember, there are some aspects you simply cannot control

Stay on good terms

Pre-empting problems is much better than waiting for them to happen, and far less costly, too. Richard Williams shows how your ST can help

when providing some kinds of service. If you are a painter and decorator and someone employs you to paint the outside of their home, you can hardly complete the job in the next fortnight if it rains from now until Christmas.

This is where clauses need to be introduced excluding or limiting your liability. Consumers have certain inviolable rights which every business person dealing with the public would do well to learn about.

You will not escape these rights simply by drafting your own convenient exclusion clauses. However, there is a very good chance that clauses in a set of terms of trading which are fair and reasonable will win the approval of the courts.

Where does the ST fit in to all this? If you want your terms of trading to look professional – and what self-respecting business person doesn't? – make use of it, and your printer, to produce the terms.

In addition, use it to draw up specifications and agreements for individual customers, keeping templates on disk which can quickly be adapted to suit a new situation.

If you spell out exactly what the customer is to receive, and when, and what you are to receive in return at each stage, there will be no doubts on either side.

Anyone who is really

only half hearted about entering into a contract with you is more likely to pull out at an early stage when they see this small print, potentially saving you a great deal of money, or at least embarrassment over having to return materials ordered from suppliers.

That is not to say that you should make your business documents look daunting. Quite the opposite should apply, with some or much of the text placed at the back of the document, so as not to deter genuine customers.

BAD DEBTS

There is a fine line between sensibly looking after your business interests and making your firm appear like a Philadelphia law practice. Tread carefully, and you will successfully pre-empt most problems without alienating the people you depend on most – your customers.

Apart from being taken to task – and, if you are really unlucky, to court – by, hopefully, a very small minority of your customers, there are other potential disasters lurking which sensible planning, and some time spent on your ST, can help prevent.

The major fear of many businesses concerns bad debts. Rule number one is that if

you are in business, you must not be afraid to ask for money.

The British are generally not good at this. If you suffer this problem, use your ST to produce invoices which you can, if you wish, hand over without comment, but which will still leave people in no doubt when they are expected to pay. Wherever possible, try to get them to pay in advance.

Never assume that people require credit. Offering a discount to those who pay in advance, or within a certain time, can be a useful lever. Late payers, on the other hand, could be penalised by your charging interest on the outstanding amount.

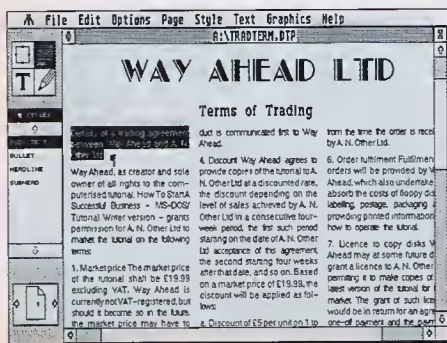
DEPOSIT

If this is part of your terms of trading, and your customer was provided with a copy, then they have little option in law. In practice, you may sometimes find yourself weighing up the advantages of charging the interest against the importance of retaining the customer's goodwill if payment is offered quickly after a reminder.

If you are providing a service, most people will balk at paying anything more than a deposit until they've seen at least some progress.

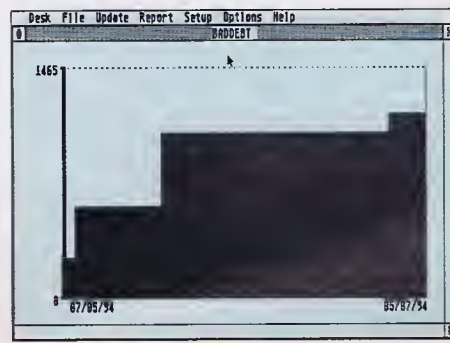
Make sure that the deposit adequately covers the cost of any material you need to order for the job, and preferably a little more, just in case the worst happens and you receive a call telling you to forget the whole thing.

Remember, it is your right to be paid. Stand up for that right, and you can pre-empt a host of possible financial problems.



Set out your terms clearly using your DTP package or word processor, and your customers will be in no doubt that you mean business

Looks like it's been a bad month for bad debts, if this graph produced in Microdeal's Personal Finance Manager Plus is anything to go by. But problems could have been avoided with careful planning



Atari ST User back issues and binder

Have you missed one of our past issues? Well now's your chance to bring your collection up to date – but hurry stocks are limited!



FEATURES: Multimedia explained, monitor round-up, picture viewing utilities and how to compute safely
REVIEWS: Mouse Tricks 2, John the Composer, DataPulse Plus, Retouch/Didot, NameNet, DataLite
ON DISK: Video Master software and TruePaint demo



FEATURES: The world's greatest hacks, replacement desktops compared, software buyers' guide and Atari printing bureaux
REVIEWS: Direct-to-disk recording software, MultiTDS, Pad 2 and SpeedoGDS
ON DISK: STDS Compiler and STDS VALUED AT £50



FEATURES: Improvisation programs, professional Atari support and DTP guide pt.1
REVIEWS: Video Titrer, Falcon Speed, View II, scanning solution and NVDI 2.51
ON DISK: Word Writer VALUED AT £50



FEATURES: Ray-tracing for Atari computers, music on the Thames, printer round-up and DTP guide pt.2
REVIEWS: Atari Works, HP Portable printer, Microvitec Cub-Scan monitor and Supermon
ON DISK: Prodata VALUED AT £80



FEATURES: Genlocking, home accounting, how software reaches the shop floor and jargon buster
REVIEWS: Protext 6, Chagall, Sweet Sixteen and Ultimate Virus Killer 5.9
FREE: 32-page ST Action games supplement
ON TWO DISKS: Demos of Protext 6 word processor and MicroProse's Dogfight air battle



FEATURES: Best software and hardware recommendations and hardware buyers' guide
REVIEWS: Omega II, Tabby, Studio Photo, Raystart and Vidi ST (12)
FREE: 64-page booklet
ON DISK: Prism Paint II demo



FEATURES: Transform images using morphing techniques
REVIEWS: Harlekin 3, Easy Text Vector, Chroma 24, Mortimer and Geneva
ON DISK: Vidi ST (12) software



FEATURES: Memory upgrades, information transfer, how to avoid mail order misery
REVIEWS: Jaguar, Digitape, UVK 6, Video Master Falcon, DA Vector Pro, EdHak 3, Magix 2
ON DISK: Tempus 2 VALUED AT £40



FEATURES: Desktop Publishing guide, Virtual Reality, Data Compression
REVIEWS: Audio Master, DA's Picture, Clarity 16, Thought!, CP-GEN, Digit
ON DISK: Easy Text Plus VALUED AT £20



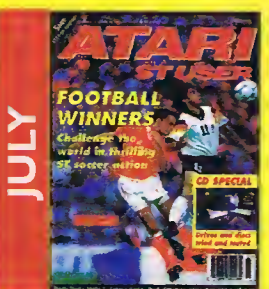
FEATURES: 25 Essential Utilities, Education, Atari Computers at Birmingham University
REVIEWS: Copyist DTP, GEM-View, Pixart
ON DISK: DA vector demo, Photochrome v4



FEATURES: Video Vitals, Frankfurt Music Show, CeBIT, Education round-up
REVIEWS: Breakthrough 2, True Images, Papyrus
ON DISK: GIP Image Processing, Violence



FEATURES: Speed, Noise Tracker guide, education software, Digital Arts profile
REVIEWS: SJ144 printer, fax modems
ON DISK: Walls of Illusion, Noise Tracker



FEATURES: CD-ROM special, Virtual Reality, Cybersex report
REVIEWS: That's Write 3, Cubase Audio, Quill, Perfect Keys, Oracle
ON DISK: Marcel Wordprocessor and three great games



Store your magazines in top condition with this high quality Atari ST User binder

	Price	Order No.
July 1993 + disk	£3.50	9259
September 1993 + disk	£3.50	9263
October 1993 + disk	£3.50	9264
November 1993 + disk	£3.50	9265
December 1993 + 2 disks	£3.50	9266
Christmas 1993 + disk	£3.50	9267
January 1994 + disk	£3.50	9268
February 1994 + disk	£3.50	9269
March 1994 + disk	£3.50	9270
April 1994 + disk	£3.50	9271
May 1994 + disk	£3.50	9272
June 1994 + disk	£3.50	9273
July 1994 + disk	£3.50	9274
Binder	£5.95	9278

All prices include VAT.
Please place your orders using the Readers' Offers form on page 43

A funny thing happened to my Falcon the other day. I was running the AtariWorks installation program and two bombs appeared on the screen. Clearly it didn't like something in my system. After some pretty unscientific research I tracked down the culprit – the NVDI screen accelerator. I quickly disabled it and carried on.

This isn't the first time I've come across problems with NVDI. I'm slowly coming round to the fact that it has definite problems in true colour mode, particularly with programs like Imagecopy, Chroma Studio 24 and TruePaint. Now I'm not particularly interested in knowing which programmer is responsible – what matters is that various incompatibilities do exist.

STABLE

There isn't a lot you can do about it of course, especially if you've forked out a lot of money for NVDI. For 99 per cent of the time you get a good return on your investment and things roll along much faster.

Despite the problems mentioned, it is a very stable program, largely because it is a complete rewrite of the VDI part of the operating system rather than a system patch like QuickST, TurboST and Warp9.

Anyway the end result was that I

Getting up to Warp speed

John Hetherington looks at a sadly underrated utility and delves deeper into DIY



Part of one of the more amusing EOS modules - based on the famous "Flying Toasters" Windows screen saver

dug out a program that I didn't think I'd ever use – the upgraded version of Codehead's Warp9. Version 3.80 has been fixed to run on the Falcon.

For half the price of NVDI, it offers equally quick screen updates, a built-in configurable screen saver and a choice of no less than 72 different system fonts. What you don't get is true colour mode acceleration (although all Warp9's other features work in true colour mode) or MultiTOS compatibility,

though it is compatible with Geneva.

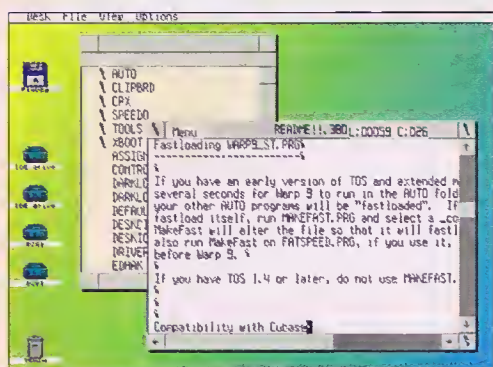
Warp9 comes on two disks packed with all kinds of interesting odds and ends. To be honest the majority are different screen saver modules but there are other utilities such as a patch for WordPerfect, a MultiDesk upgrade, fonts and background fills, a command post accessory for configuring Warp9 on the fly and a customiser program for designing your own fills and editing the replacement screen fonts. On top of that you get different versions of Warp9 for the ST, TT and Falcon.

CONFIGURABLE

Documentation is good, with a manual addendum specifically for 3.80 and installation is straightforward. The main program is placed in the AUTO folder, the command post accessory in the root directory and that's all there is to it. Of course, it helps if the fills, fonts and other files are copied onto the hard drive.

Warp9 is highly configurable. For example, the Warp9.DAT file lets you specify various options for various programs such as whether or not to use a replacement font or the system one; whether to disable the screen saver (Cubase doesn't work with the saver enabled); and to set fast-load options. It is even possible to specify a particular screen font for a particular program.

At the control panel you can set various mouse acceleration and wrap options, switch zoom boxes on or off or switch between the three different configuration screens. I've never been one for replacement screen fonts



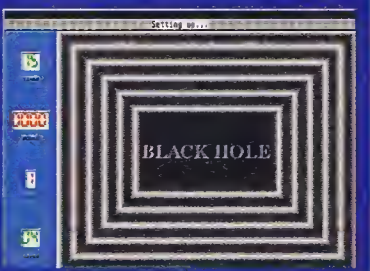
Background images can be loaded in Degas or Prism Paint format (PNT)

Falcon freebie

Games that make the most of the Falcon's extra hardware aren't exactly common, so it's nice to see a freeware attempt that uses sampled 8-bit mono sounds (stereo samples are too big to distribute easily) and 256-colour graphics.

Black Hole is a strange arcade game that runs only on VGA monitors, though it does use a standard ST joystick. I'd score it pretty low on gameplay but it does have 1.3Mb of good quality sampled sounds in AVR format and it is well worth experimenting with.

The Black Hole - it's not in the slightest bit addictive but the sound is impressive



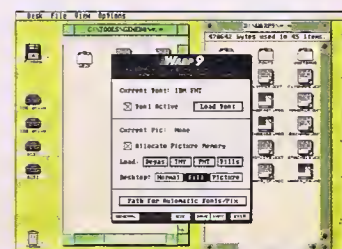
but I have to admit that after some experimentation I became quite attached to one or two of them. With Warp9 offering the ability to load and display custom background (and system) fills and even full colour images on the Falcon, you can go a long way to customising your Falcon desktop.

MODULES

The Extend-O-Save modules (the name given to the screen savers) are a touch disappointing, as colour support isn't universal and many modules fail to run in the Falcon's more exotic screen modes, but the sheer range of modules supplied makes it good fun selecting and configuring them. Some particularly interesting shareware modules are supplied, which should keep you amused for hours.

Warp9 appears to be faster than NVDI if the utility Quick Index is to be believed, but in practice there's little difference. The only time you notice the difference is when you try and boot your Falcon without either of them! Warp9 may not be as compatible as NVDI and it may not be MultiTOS or true colour compatible but it does have one big advantage – it's much cheaper (£29.95 from FaST Club on 0602 455250) and there's more to play with.

At the end of the day, what is a Falcon for if not for fun?



A custom background and the IBM font

FAST ATARI REPAIRS

FOR QUICK QUALITY WORK DONE AT COMPETITIVE PRICES

Upgrades + Engineering requirements

★ **NORMAL SERVICE**
£24.99 + parts
Free Quote

★ **GUARANTEED SAME DAY SERVICE**
+£10.00
computers received by
12.00 mid-day

also Monitors repaired

Door to door pick up + delivery anywhere in the U.K.
or see us at our workshop in Central London

Central
London

FAST COMPUTER SERVICES

144, Tanner St., Tower Bridge, London SE1 2HG

Tel. 071-252 3553

Low Cost upgrading

STE to 1Mb	£10.99
STE to 2Mb	£49.99
STFM to 1Mb	£39.99
STFM to 2.5Mb	£79.99
TOS 1.4	£25.00
TOS 2.06	£POA
Double Sided Drive	£47.00
Power Supply	£39.95
Power Supply (Exchange)	£25.00
Fitting for the above from	£15.00

ATARI
ST USER

ADVERTISERS' INDEX

A. F. Weaver	82
Analogic	57
Care Electronics	84
Compo Software	32, 33
Fast Engineering	90
Gasteiner	IFC, 3
G.F.A.	82
Goodman	58
Ladbroke Computing	10
Merlin PD	58

MT Software	82
New Age PDL	51
Power Computing	IBC
Premier Mail Order	90
Special Reserve	9
System Solutions	6
Tumblevane	20
Wright & Hayes	84
WTS	86

Premier Mail Order

Please send cheque / PO (made out to Premier Mail Order) / Access / Visa No. and expiry date to:

Dept STU101, 9-10 The Capricorn Centre, Cranes Farm Road, Basildon, Essex SS14 3JJ. Tel: 0268-271172 Fax: 0268-271173

Telephone orders: Mon-Fri 9am-7 pm and Sat & Sun 10am-4pm, We Are Open 364 Days A Year

P&P and VAT is included for all UK orders. Please add £2 P&P for Europe and £3.50 for Rest of the World

Next day delivery service available £4 per item. Some titles may not be released at the time of going to press. Most titles are despatched same day, but can take up to 28 days (E&OE)

30 Construction Kit	26.99	Fantasy World Ozzy	6.99	Lotus Trilogy	19.99
A320 Airbus Europa Edition	22.99	Fast Food Dizzy	6.99	Lure of the Tempress	12.99
A320 Airbus USA	22.99	First Samurai + Mega Lo Mania	19.99	M1 Tank Platoon	12.99
Addams Family	8.99	Flight Sim 2 Great Britain Scenery	26.99	Manchester United Europe	7.99
Alien 3	19.99	Flight Sim 2 Hawaiian Scenery	13.99	Maniac Mansion	10.99
Another World	12.99	Flight Sim 2 Japan Scenery	13.99	Megawins	8.99
Awesome	9.99	Flight Sim 2 USA No 9 Chicago	13.99	Merchant Colony	8.99
B17 Flying Fortress	22.99	Flight Sim 2 USA No 12 New York	13.99	Metal Mutant	8.99
Batman Returns	16.99	Flight Sim 2 USA No 7 Washington	13.99	Midwinter	10.99
Battlehawks 1942	10.99	Flight Sim 2 USANo 11 Detroit	13.99	Midwinter 2	14.99
Bart vs the Space Mutants	8.99	Flight Sim 2 Western Europe Scenery	13.99	Mig 29	10.99
Blue Angels	8.99	Flight Simulator 2	22.99	Nigel Mansell World Champ	19.99
Battle of Britain	12.99	Footballer of the Year 2	5.99	Night Shift	10.99
Board Genius	22.99	Formula One Grand Prix	22.99	No Second Prize	17.99
Boston Bomb Club	8.99	Fort Apache	6.99	Noddy's Playtime	16.99
Bully's Sporting Darts	8.99	Future Wars	10.99	Obit	9.99
Cadaver/The Payoff	12.99	Ghostsbusters 2	7.99	Operation Horizon	8.99
Caesar	19.99	Goal	20.99	Operation Stealth	11.99
California Games 2	16.99	Graham Gooch (1 Meg)	19.99	Parasol Stars	8.99
Cannon Fodder	19.99	Graham Gooch Second Innings	11.99	Pinkball Magic	8.99
Championship Manager 93	16.99	Graham Taylors Soccer Challenge	8.99	Pirates	10.99
Championship Manager 94 Season Disk	8.99	Gunship	10.99	Police Quest 1	12.99
Championship Manager Definitive Edition	17.99	Hard Drivin 2	8.99	Police Quest 2	12.99
Championship Manager End of Season	9.99	Hard Nova	8.99	Populous & Promised Lands	12.99
Championship Manager Italia	17.99	Heraquest	7.99	Powermanger & WW1 Data Disk	12.99
Chaos Engine	16.99	Hill Street Blues	8.99	Premier Manager 2	17.99
Civilisation	22.99	Hook	8.99	Prince of Persia	6.99
Cohort 2	19.99	Hoyle's Book of Games 1, 2 or 3	12.99	Pro Tennis Tour 2	16.99
Colonels Bequest	12.99	Huckleberry Hound in Hollywood	8.99	Pro Tennis Tour	8.99
Crime City	6.99	Indiana Jones & Fate of Atlantis	12.99	Pushover	5.99
Cruise for a Corpse	12.99	Indiana Jones - Lost Crusade	12.99	RBI Baseball 2	7.99
Crystal Kingdom Dizzy	14.99	Int. 30 Tennis	5.99	Reach for the Skies	19.99
Cybercon III	10.99	Int. Rugby Challenge	17.99	Rick Dangerous	7.99
Cyberspace	22.99	Int. Sports Challenge [S12K]	19.99	Risky Woods	8.99
O Day	22.99	Jahangir Khan Squash	6.99	Robin Hood	10.99
Discovery	6.99	Jimmy White's Snooker	12.99	Robinsons Requiem	19.99
Dizzy Collection	16.99	Killing Game Show	9.99	Robocop 3	10.99
Dizzy's Excellent Adventure	16.99	Kingmaker	22.99	Robocop	6.99
Dogfight	22.99	Kings Quest 1	12.99	Rorke's Drift	6.99
Dynablast	19.99	Kings Quest 2 or 3	12.99	Scrabble	20.99
Elite 2 (Frontier)	19.99	Knights of the Sky	14.99	Secret of Monkey Island	12.99
Elvira The Arcade Game	16.99	Laser Squad	8.99	Sensible Soccer (92/93)	16.99
European Champions	17.99	Leader	9.99	Sensible World of Soccer	8.99
European Football Championship	10.99	Legends of Valour	24.99	Shadow Lands	19.99
European Super Soccer	16.99	Leisure Suit Larry 1, 2 or 3	12.99	Shinobi	7.99
F1	17.99	Lemmings 2 (The Tribes)	17.99	Shuttle	(see The Greatest)
F15 Strike Eagle 2	14.99	Lemmings Double Pack	19.99	Sim City + Populous	19.99
F019 Stealth Fighter	14.99	Lethal Weapon	8.99	Sleepwalker	8.99
F29	10.99	Loom	12.99	Slicks	14.99
Face Off Hockey	8.99	Lords of Chaos	8.99		
Fantastic Worlds	22.99	Lotus Esprit Turbo Challenge	7.99		

Space Crusade	8.99
Space Quest 1	12.99
Space Quest 2	10.99
Spellbound Dizzy	6.99
Starblades	8.99
Storm Master	8.99
Streethigher 2	12.99
Sirder	7.99
Striker	8.99
Strip Poker 2 + Datadisk	6.99
Super Space Invaders	8.99
Superfighter	17.99
Superski 2	8.99
Switchblade II	8.99
Tactical Manager - English	19.99
Tennis Cup 2	8.99
Tetris	14.99
The Adventures of Robin Hood	12.99
The Final Conflict	6.99
The Greatest	21.99
Their Finest Hour - Battle of Britain	12.99
Their Finest Mission	9.99
Thomas the Tank Engine	6.99
Thunderstrike	7.99
Toki	8.99
Trivial Pursuit	6.99
UIMS Compilation	27.99
Utopia	8.99
War in the Gulf	20.99
Winter Gold	12.99
Winter Supersports	16.99
Wizkid	10.99
World Class Leaderboard	10.99
WWF1	8.99
WWF2	8.99
Zak McKracken	10.99
Zool	8.99

SPECIAL OFFERS

Breach 2	5.99
Chaos Strikes Back	5.99
Charge of the Light Brigade	5.99
European Championship 1992	5.99
Kick Off 2 Final Whistle	5.99
Kick Off 2 Winning Tactics	5.99
Noddy's Playtime	16.99
Psycho Selection Soccer	9.99
Sabre Team	9.99
Shadowlands	9.99
World Class Rugby [5 Nations]	9.99

JOYSTICKS/ACCESSORIES

10 Capacity 3.5" Disk Box	1.99
40 Capacity 3.5" Disk Box	4.99
50 Capacity 3.5" Disk Box	5.99
80 Capacity 3.5" Disk Box	6.99
100 Capacity 3.5" Disk Box	7.99
Cheetah 125+	7.99
Cheetah Bug	11.99
Competition Pro Extra	14.99
Free Wheel Steering Wheel	24.99
Gravis Adv. Switch Joystick	22.99
Gravis Gamepad	15.99
Mouse Mat	1.99
Quick Joy Tap Star	17.99
Quick Joy 2 Turbo	10.99
Quick Joy Jet Fighter	10.99
Quick Joy Pedals	17.99
Suncom Tac 2	7.99
Suncom Slik Stick	5.99
Wico "Q" Stick	4.99
3 Button Mouse	10.99

EDUCATIONAL

Better Maths [12-16 GCSE]	13.99
Better Spelling [8-11]	13.99
Cave Maze [8-12]	9.99
Fraction Gobins [8-13]	9.99
Fun School 2 [UNDER 6]	6.99
Fun School 2 [6-8]	6.99
Fun School 3 [6-8]	6.99
Fun School 4 [UNDER 5]	6.99
Fun School 4 [5-7]	6.99
Fun School 4 [7-9]	6.99
Junior Typist [5-10]	10.99
Magic Maths [4-8]	13.99
Maths Dragons [6-13]	13.99
Maths Maria [8-12]	16.99
Noddy's Play Time [3-7]	16.99
Picture Fractions [7-10]	9.99
Reasoning with Trolls [5-12]	9.99
The Three Bears	13.99
Tidy The House [6-10]	9.99

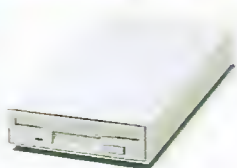
3.5 BLANK DISKS

TDK	VERBATIM	PRECISION	UNBRANDED	RECYCLED
10	7.99	6.49	5.99	4.50
20	14.50	11.99	10.99	8.50
30	21.99	17.49	15.99	12.00
40	28.49	21.99	20.49	15.00
50	35.00	26.00	23.99	17.50
100	65.00	49.99	44.99	35.00



POWER COMPUTING LTD

44a/b Stanley Street Bedford MK41 7RW



Power Drives

PC720B, the award winning external disk drive which includes a virus blocker, built-in Blitz Turbo and is able to boot from drive B.

PC720B	£60
PC720P (inc. PSU)	£55
PC720I (internal)	£39.95
<small>(360K upgrade drive, needs case modification)</small>	
PC720 OI (official)	£45
<small>(720K internal replacement drive)</small>	



Drive B Cable

If you have an internal drive that is not compatible with 'boot from drive B', this cable will solve your problem.

Drive-B cable	£9.95
---------------------	--------------



Blitz Turbo

Back-up disks at lightning speeds, Blitz copies from the internal to the external drive and cleverly by-passes your ST's controller chip. In around 40 seconds you can back-up an ST disk, what's more you can switch between your disk drive and Blitz Turbo without disconnecting your Blitz interface. (1988 Copyright act applies)

Blitz Turbo.....	£25
------------------	------------



Power Scanner

The award winning scanner from Power Computing allows you to scan up to 400DPI in real-time greyscale, with autoscanner rate detect. The scanning software included allows you to edit and manipulate any image you scan.

Power Scanner	£99
Power Scanner with OCR.....	£149

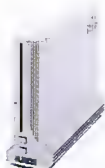
Ring Interruption

Use with Ultimate Ripper or SuperMon. Stop games or programs in their tracks, search for infinite lives and hack with code. A press of the key and the program is restarted.

Ring Interruption.....	£15
------------------------	------------

Memory

1MB Simm	£35
----------------	------------

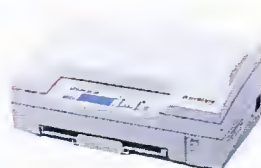


CalCom v.32 bis

External fax and data modem including these many features:

- External Fax & Data modem
- Supports up to 57,600 bps
- Full Haynes AT command set supported
- Supports class 1, 2 and 3 fax commands
- Call back security
- Optional power on auto-dial
- Supports error correction + detection
- Leased line support
- Supplied with Amiga and PC software for Windows
- All cables & Power supply included

Calcom v.32 bis	£169
Includes modem software	



Epson Printers

The LQ-150 is a fast quiet 24-pin colour dot matrix printer. With draft printing speeds of up to 216 cps and high quality colour text and graphics output. The LQ-150 has a built-in 50 sheet paper cassette with automatic paper feed, and an optional tractor unit for use with continuous and multi-part stationery.

Operating either flat or flipped on its back - to save desk space - the LQ-150 incorporates Epson's ESC/P and ESP/P2 printer languages, ensuring compatibility with most popular software packages. It also comes supplied with Windows printer driver for use on your IBM as well.

Power Computing being an Epson distributor and dealer can supply all Epson products at uncompromising prices.

Epson LQ-150 + cable	£229
Tractor unit	£29.95
Black ribbon	£5.95
Colour ribbon	£15.95
Epson LQ-100 + cable	£209

SuperMon

SuperMon comes with all the features of the 'Ultimate Ripper' and more. Some of the features included with SuperMon are: Program switcher- allows to programs to be in the memory simultaneously and switched between at the touch of a key, Printer spooler- allows files to be printed at the same time as other tasks, Comprehensive debugger- disassemble programs and step through them, intercept OS calls, search memory or find where a routine is called from automatically, Diagnostics function- check the internal functioning of your ST disk analyser, custom format disks, read/write sectors, hide files, Utilities- the SuperMon also has many utility functions available, including reset proof RAM disk, mouse trap function, time display, screen snapshot and 50/60Hz toggle.

Ultimate Ripper	£25
Including SuperMon.....	£35

Miscellaneous

Atari Mouse.....	£15
Power Clock.....	£17.99
Optical Mouse.....	£29.95
Replacement optical mat	£10
100 Branded disks + box.....	£49
10 Branded disks	£5
Intruder 1 joystick.....	£29.99
Maverick 1 joystick	£15.99
Apache 1 joystick	£7.99

Order Form

Name .....	.....
Address .....	.....
.....	..... Postcode
Telephone No. ....	.....
System Owned .....	.....
Description .....	.....
.....
I enclose a cheque/PO for £ .....	.....
Credit Card No. ....	.....
Expiry Date .....	.....
Signature .....	.....

Delivery next day £5.00 2-3 days £2.50 Saturday £10.00 deliveries are subject to stock availability.
Please make cheques payable to Power Computing Ltd

Prices are valid for the month of publication only. E & OE. All prices include VAT. Power Computing Ltd 1994. Goods are sold subject to our standard terms and conditions of sale and are available on request. Specifications and prices are subject to change without notice, and all trademarks are acknowledged. All Power Computing Ltd products come with a back to base 12 month guarantee.



TEL 0234 273000
FAX 0234 352207

ATARI

ST USER

CoverDisk

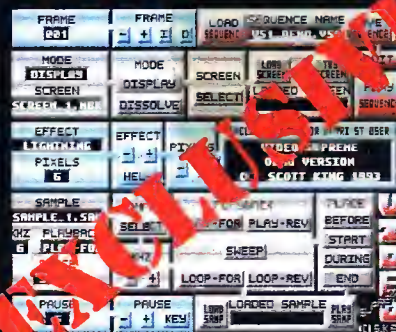
Top quality
software for
your ST each
and every
feature-packed
issue

On this month's disk...



Video Supreme

Create and record
outstanding graphics and
title screens to your videos,
including digitised sound
effects,
with this
excellent
video titling
software



Utopos

Superb split-screen two player
game with lightening fast eight-way
scrolling and brilliant graphics

STart-It

Organise your programs and
accessories with this excellent boot
manager utility

PLUS: More great programs besides